

SFCA- 0489
#11

HIV PREVENTION PLAN

hope

awareness

knowledge

intervention

SAN FRANCISCO 1997

97 00446

SAN FRANCISCO HIV PREVENTION PLAN

1997

Developed by the

HIV Prevention Planning Council

**A Community Planning Body Funded by
the Centers for Disease Control and Prevention**

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In Partnership with the

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Prepared by

Harder+Company Community Research

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Dedication:

This plan is dedicated to the people in San Francisco who have been infected and affected by HIV and AIDS, and to the memories of our lovers, families, friends, co-workers, and leaders who have passed on due to this devastating epidemic.

A special dedication is given to John Watters, former HPPC member and researcher who greatly contributed to a better understanding of the impact of the epidemic, particularly among injection drug users. John Watters died in 1996.

Special thanks and appreciation go to the many people (and their sponsoring organizations) who contributed countless hours to HIV prevention planning in San Francisco. These include current and former members of the HIV Prevention Planning Council (HPPC) and its committees; the Co-Chairs of the HPPC; the San Francisco Department of Public Health AIDS Office, and the consultants.

GUIDE TO THE 1997 HIV PREVENTION PLAN

I. INTRODUCTION

The HIV Prevention Planning Council presents the 1997 San Francisco HIV Prevention Plan with great pride. HPPC members contributed between 3,000 and 6,000 hours in developing this Prevention Plan. Additionally, several thousand hours went into its development by AIDS Office staff and consultants. This plan contains cutting-edge, forward-thinking recommendations for the direction for HIV prevention efforts in the City and County of San Francisco. It is the product of the concerted efforts of individuals affected and infected by HIV, prevention providers, government agencies, researchers, and advocates.

Everyone in San Francisco has a vital stake and role in the development of a viable, efficient community-based HIV prevention program. Regardless of ethnicity, age, gender, sexual orientation, or sexual identity, there is a need for effective prevention programs, particularly in San Francisco, where the high prevalence of HIV makes the opportunity for transmission and infection a continuing and critical issue.

This Prevention Plan was written for four principal audiences:

- **Members of the HIV Prevention Planning Council**, former and current, who will see their efforts reflected in these pages, and future members who will use this Plan as a basis for moving forward with the further development of prevention planning.
- **Department of Public Health AIDS Office** which is responsible for implementing many of the recommendations contained in the Prevention Plan.
- **Centers for Disease Control and Prevention** which, it is hoped, will see this Plan as a model for the nation and will give the quality of this Plan the attention it deserves when funding amounts are considered.
- **HIV Prevention Providers** in San Francisco who are perhaps the most important readers of this Plan are asked to look to it for guidance to make changes that will enable their programs to better serve people at risk for HIV.

II. SPECIAL FEATURES OF THE 1997 PREVENTION PLAN

It is readily apparent that this Prevention Plan is lengthy — over 700 pages. Not all persons will read the plan from beginning to end, although those that do will gain the greatest benefit. Because not everyone will read each chapter, this Prevention Plan has several special features to enable the reader more efficient and effective access to information in it.

Table of Contents - The Table of Contents contains, for each Chapter, the first two levels of subheadings. The reader can quickly find topics of interest by scanning the subheadings listed in the Table of Contents.

Chapter Subheadings - Each Chapter contains several sections, shown in capital letters with Roman numerals. Common to almost all the chapters are sections containing the committee operations, recommendations, and summary and conclusion. Most sections have several subheadings that enable the reader to quickly find information of interest within the section. These headings can assist readers who are browsing through the Plan to identify topics of interest.

Index - The format of the Index was specially developed for this Prevention Plan to enable quick access to topics of interest. The index, contained towards the end of the Plan, is divided into general categories — Behavioral Risk Populations, Co-variates, Co-factors, Behaviors, Interventions, and Organizations. Within each general category is a list of related words and the associated page numbers. The items in the index have been consolidated, so that similar words are combined. For example, “homeless” and “homelessness” have been combined into one item; “Blacks,” “African Americans” and “Af. Am.” (used as an abbreviation in charts) have been combined. Asian/Pacific Islander, Asian and Pacific Islander, Asian/Pac. Is. and API (used as an abbreviation in charts) have been combined.

Glossary - A Glossary of key terms used in the Prevention Plan, and their definitions is provided. (Abbreviations and acronyms have been kept to a minimum within the text and, when used, are spelled out when first used within a chapter.)

Bibliography - The Bibliography at the end of the Prevention Plan contains the complete citations of all articles and reports referenced in the Plan. Readers who wish to extensively pursue a topic may use the bibliography to find references to further information. Most of the articles and reports can be found at an academic library.

III. HOW TO FIND INFORMATION IN THE PREVENTION PLAN

It is anticipated that readers will want different types of information from the Plan, and a single reader may want to use the Plan in different ways at different times. This section outlines several key uses of the Plan and provides guidance about how to obtain each type of information quickly.

Want to know the key ideas presented in the Plan?

Read the summary at the end of each chapter and the final chapter of the Plan, Chapter 11.

Want to know what recommendations were made by the HPPC?

Look in the Table of Contents and find the page number for the Recommendations section of each chapter. In two chapters, recommendations are not labeled as such: in Chapter 2 - Goals and Objectives, the recommendations are the goals and objectives listed in Section III. In Chapter 4 - Strategies and Interventions, there is no section labeled “recommendations”; the chapter contains guidance about recommended standards of practice and suggested uses for each intervention. In all other chapters, the specific recommendations are clearly identified in the table of contents.

Want to know more about the planning process and methods used to form recommendations?

Read Chapter 1 - The Community Planning Process, and the sections labeled “Committee Operations” found in most chapters (the committee operations section related to Chapters 9 and 10 is presented in Chapter 10).

Want information to write grants, applications, and needs assessments?

The Prevention Plan can assist Prevention Providers in applying for not only AIDS Office funds, but other funds as well. Extensive information is contained in the plan about many groups at risk for HIV, which can be used by prevention providers when writing applications.

Chapter 3 - Epidemiologic Profile has a tremendous amount of information. Several key sections are highlighted below:

- Section II, San Francisco and Its People - descriptions of neighborhoods and a profile of the City as a whole.
- Section III - City-Wide Population Estimates - estimates of the size of behavioral risk populations.
- Section IV - AIDS in San Francisco - information about cumulative AIDS cases by transmission groups and recent AIDS cases by behavioral risk groups.
- Section V - Prevalence and Incidence of HIV - text and charts summarizing prevalence and incidence studies in San Francisco.
- Section VI - Estimates of HIV Prevalence, based on the 1992 Consensus Report which reports on a series of meetings with researchers to develop prevalence estimates for groups not well studied
- Section VII - Behavioral Risk Studies - summary of relevant (mostly San Francisco) behavioral risk studies of the 12 behavioral risk populations.
- Section IX - Co-factors - summaries of articles and reports about 18 biological, economic, psychological, social, or situational factors that influence risk behavior.

Chapter 4 - Strategies and Interventions - contains summary information about several behavioral theories used to develop HIV prevention programs and information about the effectiveness of various interventions.

Chapter 5 - Priority-Setting Criteria and the attachments to that chapter contain information about estimated average annual frequency of risk behaviors for each of the behavioral risk populations.

Chapter 7 - Resource Inventory describes what programs are funded in 1996 by agency, behavior risk population, and intervention. This information can be used to identify gaps in services.

Want to know about the expectations for AIDS-Office—funded prevention programs for evaluation and needs assessments?

Read Chapter 9 - Strategic Evaluation Plan. Also read Chapter 10 to learn more about the technical assistance plan for prevention providers.

Want to know more about what makes for effective referrals of clients and models for linkages among agencies?

Read Chapter 8 - Linkages and Referrals.

Want to find every mention in the plan of a particular group or topic?

Try the index. By flipping between the index and the Table of Contents, a reader can quickly find information about a target group or other topic with reference to other topics (such as behavior, co-factors or interventions).

IV. WHAT IS CONTAINED IN THE 1997 HIV PREVENTION PLAN?

The 1997 San Francisco HIV Prevention Plan replaces the 1995 Plan. Much useful information from the previous version has been updated and drawn into the 1997 version. The 1997 Plan also contains two chapters developed in 1995 after the 1995 Plan was issued: Priority-Setting Criteria and Strategies and Interventions. A brief description of each chapter is presented below.

1. The Community Planning Process - This chapter describes the three-year (1994-1996) HIV prevention planning efforts, and includes an overview of the planning accomplishments, structure of the process, and documents that govern the process. Additionally, the chapter describes the work of the 1996 Membership Committee. This chapter contains a multi-page table showing the chronology of Council decisions for 1996, which is a useful overview of recommendations presented in subsequent chapters.
2. Goals and Objectives - This chapter presents the goals and objectives for 1995 and 1996 and the progress made on them by the end of 1996. Additionally, the chapter presents the 1997 goals and objectives for the HPPC, the CDC application, and prevention objectives. The HPPC goals and objectives are a good indication of the direction that the Council will take in 1997, and the prevention goals and objectives provide an overview of new expectations for prevention providers. More detail is provided about these expectations in subsequent chapters.

3. **Epidemiologic Profile** - The Chapter contains over 200 pages of information not only about AIDS cases, but also about many other topics. This chapter is most useful as a source for summaries of prevalence studies, behavioral risk studies, and studies about co-factors for HIV. Recommendations in this chapter include a priority list of research studies for which the Council urges funding.
4. **Strategies and Interventions** - Developed in 1995, this Chapter provides extensive information about the most commonly used interventions, such as venue-based outreach (also known as street outreach), needle exchange programs, counseling and testing, single session group workshops, and others. For each intervention, there is information about standards for service provision, expected outcomes, and suggested uses. Additionally, a summary of what is known about the effectiveness of the intervention is provided.
5. **Priority-Setting Criteria** - Also developed in 1995, this chapter used the criteria and philosophy developed in 1994 to prioritize behavioral risk populations through the use of a matrix. The priority-setting matrix contains elements for the estimated frequency of risk behaviors for each population, the relative risk of those behaviors, estimated seroprevalence of the population, and population size. The concepts developed in this chapter were carried over to the development of the resource allocation recommendations, contained in the next chapter. When this chapter was first developed, it contained the section on co-factors, which was moved to Chapter 3 - Epidemiologic Profile.
6. **Resource Allocation** - This chapter presents and discusses the principal elements of the resource allocation recommendations that guided the distribution of HIV prevention funds by the AIDS Office. Included in the chapter are guidelines for 1) the Request for Proposal process; 2) guidance for evaluating risk behavior and/or prevalence data supplied by providers in their applications; and 3) recommendations for setting aside funds for certain prevention activities.
7. **Resource Inventory** - This chapter contains a series of charts that show AIDS Office—funded prevention services for 1996 by agency, by behavioral risk population, and by intervention. Further, the chapter contains recommendations for the design of a resource inventory in future years. The transition to behavioral risk populations and away from transmission groups or target groups as the basis for planning will occur over more than one year. For 1996, only part of the resource inventory can be presented using the behavioral risk population model. In future years, as providers' applications are based on this concept, the remaining parts of the inventory will be formatted by behavioral risk population.
8. **Linkages and Coordination** - Based on a series of interviews with prevention, care and treatment, and social service providers, the Linkages Committee made recommendations about referrals and linkages, which are presented in this chapter, along with information from the interviews.

9. Strategic Evaluation/Data Collection - This chapter presents guidelines for a city-wide evaluation plan that, over time, enables San Francisco providers to measure the impact of prevention. AIDS-Office prevention providers will be required to participate in the strategic evaluation and data collection plan beginning in 1997. This chapter lays out the timeline for implementing the city-wide data collection and evaluation plan. Providers will want to take particular note of the guidance in this chapter.
10. Capacity Building Technical Assistance - Recognizing that HIV prevention providers may need technical assistance to implement the guidance presented in Chapter 9, as well as technical assistance for other organizational issues, a plan has been developed to render technical assistance in areas of greatest need. That technical assistance plan is described in this chapter, along with the time line for implementing the technical assistance.
11. Synthesis and Future Directions - This chapter summarizes the 1996 HIV Prevention Plan and notes likely future directions for the Council and for HIV Prevention Planning.

V. CONCLUSION

Within this Prevention Plan is guidance for changing the ways in which HIV prevention services are funded, designed, implemented, and evaluated. While it will require several years before some of these changes can be fully achieved, let alone evaluated, other elements of the guidance have already been put into place. The issuance of this Prevention Plan does not halt planning efforts. Much work remains to ensure effective, culturally-appropriate, comprehensive HIV prevention education for San Francisco. This work requires the participation of the community. As the Centers for Disease Control and Prevention said in their Guidance for prevention planning,

A participatory process will result in programs that are responsive to high priority, community-validated needs within defined populations. HIV prevention programs developed without community collaboration are unlikely to be successful in preventing the transmission of HIV infection or in garnering the necessary public support for effective implementation. Persons at risk for HIV infection and persons with HIV infection should play a key role in identifying prevention needs not adequately being met by existing programs and in planning for needed services that are culturally appropriate.

The community is urged to participate in this planning process. There are several ways to participate:

- **Apply to Join the Council** - Call the AIDS Office (554-9000) and ask for an HPPC nominations form.

- **Join a Committee as a Community Member.** Community members are persons who are not officially Council members, but regularly attend and participate on a committee. Community members are entitled to fully participate and to vote on the committee (but not the Council). Find out more about the planning process, choose a committee, and talk to the Committee Chair.
- **Attend Council meetings** - Members of the public are invited to attend Council meetings and listen to the discussion. Council meetings usually occur on the second Thursday of the month from 3 p.m. or 4 p.m. until 6 p.m. They sometimes also occur on the fourth Thursday. Call the AIDS Office for date, time, and location.
- **Offer Public Comment** - At each Council meeting, time is reserved for members of the public to provide insight and comments (two minutes per person). Attend a Council meeting and sign up at the reception table to provide comment.

TABLE OF CONTENTS

Chapter 1 - The Community Planning Process	1
I. The Planning Process	1
Introduction	1
San Francisco's HIV Prevention Community Planning Process	1
Overview of Planning Accomplishments - January 1994 - December 1996.....	2
Support for Planning.....	5
Council Membership	7
Council Governance	11
Council Operations	12
II. Membership Committee.....	14
Committee Membership.....	14
Decision Making Process.....	14
Tasks of the Committee	15
III. Summary and Implications	15
Attachment 1	17
Attachment 2	32
Attachment 3	38
Attachment 4	41
Attachment 5	42
Chapter 2 - Goals and Objectives	43
I. Introduction.....	43
II. Past Years' Goals and Objectives.....	43
Goals and Objectives - 1995	43
Progress Towards Achieving 1995 Goals and Objectives.....	45
HPPC Goals and Objectives - 1996.....	46
Progress on 1996 Goals and Objectives	50
III. The Committee and the Decision-Making Process	51
IV 1997 Goals and Objectives for the Future.....	52
1997 HPPC Goals and Objectives.....	52
Goals and Objectives for the 1997 Application to the CDC.....	55
Prevention Objectives for 1997.....	57
V. Conclusion.....	58
Chapter 3 - Epidemiologic Profile.....	60
I. Introduction.....	60
What is Contained in this Chapter.....	60
Types of Information Used in the Epidemiologic Profile	61
II. San Francisco and Its People.....	67
Introduction	67
San Francisco Neighborhoods.....	69

Psychological Co-Factors	315
Social Support	315
Mental Health Stressors	318
Self-Esteem	321
Behavioral Co-Factors	326
Substance Use/Abuse.....	326
Commercial Sex Work	337
Multiple Partners and Risky Partners	342
Knowledge Of Services	345
Language Barriers and Low Literacy	347
Incarceration.....	351
Low Perception of Risk	354
Discrimination.....	356
X. Committee Processes and Tasks	366
Committee Membership.....	366
Committee Tasks	366
Processes for Decision Making	367
XI. Recommendations.....	371
Recommendations for Future Studies.....	371
Studies within this table are not in order by priority.....	374
Obtaining HPPC Letters of Support for Research Studies	375
XII. SUMMARY AND IMPLICATIONS	375
Chapter 4 - Strategies and Interventions.....	377
I. Introduction.....	379
The Committee and the Decision-Making Process	379
What is in this Chapter	379
II General Recommendations.....	381
Multiple Approaches	381
Needs Assessment	381
Program Design.....	382
Evaluation	382
Linkages and Coordination	384
Service Delivery Training.....	384
Volunteers	384
Prevention Messages.....	385
Confidentiality.....	385
Feedback and Grievance Procedures	386
III Behavior Theory and HIV Prevention.....	386
Introduction.....	386
Health Belief Model	387
Social Cognitive Theory	388
AIDS Risk Reduction Model	390
Stages Of Behavior Change Model	392

Theory Of Reasoned Action	393
Empowerment Theory	394
Social Networks/Social Support Theory	396
Diffusion Of Innovations	397
Social Marketing Theory	400
Conclusions	400
IV Guidelines for Strategies and Interventions.....	400
Introduction.....	400
Strategies.....	403
Peer Education.....	403
Natural Opinion Leaders.....	408
Social Marketing	410
Community Organizing	414
Interventions.....	416
One-on-One Interventions	416
Venue-Based (Street And Community) Individual Outreach.....	417
Prevention Case Management (PCM)	421
Individual Risk Reduction Counseling.....	426
Counseling, Testing, Referral, and Partner Notification (CTRPN)	428
Needle Exchange Programs	441
Hotline	445
Small Group Interventions.....	448
Single Session Group Workshops	448
Multiple Session Group Workshops.....	452
Community Level Interventions.....	457
Speakers' Bureaus	457
Media	459
Venue-Based Group Outreach	464
Chapter 5 - Priority-Setting for Behavioral Risk Groups	467
I. Introduction.....	467
II. Committee Operations	468
III. Recommendations for Priority-Setting.....	469
Phase I - Behaviors and Relative Risk	470
Phase II - Prevalence and Population Size.....	472
Phase III - Co-factors	474
Phase IV—Provider-Specific Information	475
IV. Summary of Co-Factors.....	478
Attachment 1.A Calculations Used to Derive Estimates In the Phase I Matrix.....	481
Attachment 1.B Information Gathered About Frequency of Risk Behaviors	495
Attachment 1.C References	508
Attachment 2 Estimates of Relative Risk and Infectivity Rates.....	512
Attachment 3 Estimates of the Frequency and Relative Risk of Behaviors Among Transgender Persons	516

Chapter 6 - Resource Allocation	519
I. Introduction.....	519
II. Committee Operations.....	520
Tasks of the Committee.....	520
Committee Membership	521
Process for Decision Making.....	522
III. Key Considerations for Resource Allocation	522
Elements of the Request for Proposals.....	522
Funding for Activity-based Prevention (Set-Asides).....	526
IV. Summary of Recommendations.....	528
Evaluation of the RFP Process	529
V. Council Concerns Regarding Implementation of Recommendations.....	529
VI. Conclusion.....	532
Attachment 1: Resource Allocation Recommendations.....	534
Attachment 2: Activities Considered for Set-Aside Funding.....	540
Attachment 3: CDC Application Letter of Concurrence; Statement of Concern; and AIDS Office Response	544
Chapter 7 - Resource Inventory.....	547
I. Introduction.....	547
II. Recommendations for Format of Future Resource Inventories.....	575
Resource Inventory for End of 1997.....	575
Resource Inventory for End of 1998.....	576
Chapter 8 - Linkages.....	578
I. Introduction	578
The Committee and the Decision-making Process	578
II. Methods for Collecting Information	579
III. Prevention Providers' Use of Referrals	580
Types of Referral	580
Providers' Knowledge of Referral Resources	581
Barriers to Providers' Knowledge of Referral Resources.....	582
Proportion of Clients Receiving Referrals	582
Client Assessment for Referral.....	582
Referral Mechanisms.....	583
Referral Documentation	584
Referral Follow-up.....	585
Incoming Referrals.....	586
Barriers to a Successful Referral	586
IV. Other Linkages	588
Current Linkages Among HIV Prevention and Other Providers.....	588
Barriers to Linkages Between Organizations	589
V. Linkages and Referrals with Non-HIV Related Services.....	590

VI. Linkages and Referrals With HIV Care and Treatment Services	590
VII. Suggestions from the Field	591
Suggestions to Enhance Referrals.....	591
Additional Linkages Needed	592
VIII. Themes.....	594
IX. HPPC Recommendations for Referrals and Linkages.....	595
X. Collaborations in HIV Prevention	599
XI. Conclusion.....	602
Chapter 9: Strategic Evaluation/Data Collection Plan.....	604
I. Introduction.....	604
Overview of the Chapter	604
Strategic Evaluation/Data Collection Philosophy.....	604
II. Prevention Provider Level.....	606
Guiding Principles at the Prevention Provider Level	609
Prevention Provider Level Objectives	610
Accountability.....	613
III. Intervention Research Level	614
Research Inventory - Using Information to Make A Difference.....	614
Setting Research Priorities - Using Information to Make A Difference.....	615
Conducting Prioritized Studies	615
Guiding Principles.....	615
Intervention Research Level Objectives.....	616
Accountability.....	618
IV. Population-Based Prevention Surveillance.....	619
Guiding Principles.....	620
Population-based Prevention Surveillance Level Objectives.....	620
Accountability.....	622
V. Methods Used in Developing the Strategic Evaluation Plan	623
Background Research - Preliminary Assessment	623
Call for Standardization and Capacity-Building.....	624
Evolution of the Strategic Plan.....	624
Attachment 1	625
Attachment 2.....	628
Attachment 3	630
Attachment 4:.....	634
Attachment 5:.....	638
Chapter 10 - Capacity Building — Organizational Development and Technical Assistance for HIV Prevention Providers.....	639
I. Introduction.....	639
Overview of the Chapter	639
Background.....	639
Collaborative Planning and Partnerships	640

II. Capacity Assessment Process and Methodology	641
Development of the Assessment Process	641
Methodology	641
Analysis	642
III. Assessment Findings and Implications for Technical Assistance	643
Themes Across Prevention Programs	643
Other Findings	655
Summary of Findings and Implications for Provision of Technical Assistance	656
IV. Technical Assistance Delivery Plan.....	657
Five-Year Objectives for the Capacity Building Program.....	658
Developing the Capacity Building Plans.....	660
Coordination of Consulting Resources	661
V. Committee Operations.....	661
Tasks of the Committee.....	661
The Committee Process.....	661
Committee Composition/Representation.....	662
Meetings and Training	662
Decision-Making Procedure	662
Attachment 1	664
Chapter 11 - Synthesis and Future Directions.....	671
I. Introduction	671
II. Building Blocks of the Plan.....	671
III. Connections Between Planning Elements	674
Strategies and Interventions: Behavior Groups	674
Strategies and Interventions: Target Populations	674
Priority-Setting Criteria.....	676
Priority-Setting Criteria - Phase III and IV	676
Resource Allocation	677
Strategic Evaluation Plan	678
Organizational Development and Technical Assistance.....	680
Future Priority Research Studies	681
A Coordinated System of HIV Prevention: Referrals and Linkages.....	681
IV. Future Directions	682
Goals and Objectives.....	682
A Focus on Process	684
V. Conclusion	685

CHAPTER 1 - THE COMMUNITY PLANNING PROCESS

I. THE PLANNING PROCESS

Introduction

In January 1994 the Centers for Disease Control and Prevention (CDC) awarded grants to the 65 Cooperative Agreement grantees in Title I and Title II areas across the United States for the specific purpose of creating community-wide planning processes for HIV prevention. The grants specified that recipients were to seek significant and meaningful involvement of their communities in developing comprehensive HIV prevention plans. The community plans would then form the basis of applications for future cooperative agreement prevention funding from the CDC. The planning initiative was based on the assumption that the participatory process offers the best means for making decisions about HIV prevention programming. As defined in CDC's guidance to planning grantees, community planning was to be:

An ongoing process by which public health agencies share responsibility with other state/local agencies, non-government organizations, and community representatives for identifying needs, determining priorities and developing comprehensive HIV prevention plans¹.

Grantees were allowed considerable flexibility in the design and operation of their planning bodies. However, CDC specified that all community planning efforts were to be evidence-based and organized around the principles of parity, inclusion, and representation.

San Francisco's HIV Prevention Community Planning Process

The San Francisco Department of Public Health AIDS Office had been exploring ways to organize a more coordinated community-wide HIV prevention effort since 1993. The AIDS Office had been working towards a new collaborative approach to their requests for proposals and prevention program funding processes, urged by local AIDS activists. Support from a special grant enabled AIDS Office staff to begin thinking about ways to foster comprehensive, community-based planning in San Francisco in late 1993, and the CDC planning grant made it possible to proceed with an ambitious and inclusive community planning process.

Under CDC Guidance, the Department of Public Health AIDS Office was designated as the lead agency for HIV prevention community planning, and the AIDS Office created a new planning body, the HIV Prevention Planning Council (HPPC). This body was given the responsibility of developing the HIV prevention plan for the City and County of San Francisco.

¹ See Attachment 1 at end of this chapter for the complete Guidance.

The HPPC has been an active partner with the AIDS Office for the past three years in re-designing HIV prevention efforts in the City.

Overview of Planning Accomplishments - January 1994 - December 1996

The activities of the first year of community planning (1994) were organized by two primary objectives: a) development of an open, participatory community planning process, and b) formation and mobilization of the planning body. Bylaws, initially drafted by AIDS Office staff and then modified and adopted by the newly formed Planning Council, established policies and procedures for governance, including conflict of interest and attendance rules. A bi-weekly Council schedule was established. Meetings were open to the public, with public comment periods available during Council sessions. Midway through the year, the Planning Council was divided into committees, each responsible for the development of a particular element, or chapter, of the Plan. HPPC members requested their preferred committee, and the Co-Chairs selected committee members to ensure that each committee was balanced by ethnicity, gender, and expertise. Committee tasks and timelines were developed by the Co-Chairs based on CDC guidance. Committees elected their own committee chairs and worked together during the Council's "off" weeks, although some committees met weekly in order to meet the deadlines.

The ultimate goal of Year 1 was development and production of San Francisco's first HIV Prevention Plan. The 1995 San Francisco HIV Prevention Plan, organized in nine chapters, included a state of the art description of the epidemiology of HIV/AIDS in San Francisco, a resource inventory of current providers, a discussion of strategies and interventions used to fight the spread of the epidemic, criteria for selecting prevention strategies, and goals and objectives. The Plan also included the Council's landmark decision to identify populations by behavior rather than demographic characteristics. Reflecting the most hotly debated topic of the first planning year, the HIV Prevention Plan stopped short of recommending specific criteria for prioritizing target groups. Instead, the final document was seen as the first iteration of a prevention plan that would continue to be developed the following year. As stated in the Executive Summary:

The HPPC viewed its charge in 1994 to be that of building the foundation upon which future planning can be based. Towards that goal, much of [the Plan] asks the question, "What is the information that we need to know in order to create and implement effective HIV prevention programs in San Francisco?"

A draft of the San Francisco HIV Prevention Plan was submitted to the CDC in October 1994, reviewed through the external review process, and approved unconditionally in early 1995. Indeed, San Francisco's prevention plan received the highest rating. Subsequent reviews of the AIDS Office 1994 Cooperative Agreement for HIV Prevention assessed the first year community planning activities as exemplary. The Plan was produced in quantity and made widely available in San Francisco in January 1995.

In the second year of planning, 1995, the full Council met once a month during the first quarter, then twice monthly (18 times) for the balance of the year. Public comment periods were continued during each Council session. Two committees and a task force were formed to continue work that had begun in the first year. The Strategies and Interventions Committee was charged with the responsibility of prioritizing HIV prevention interventions by behavioral risk group. The Priority-Setting Committee was responsible for developing criteria for prioritizing behavioral risk populations. The Evaluation Task Force was created to establish methods for prevention providers to assess and document their findings about transmission groups, barriers to and successes of interventions, and impact of interventions on behavior change. Originally conceived of as a group with a short-term mission that would be disbanded upon completion, the Task Force evolved into the Evaluation and Technical Assistance Committee in the following year when the issues proved to be complex.

The products of the two committees were two chapters which were produced and distributed as an addendum to the 1995 Plan. Rather than prioritizing interventions by behavioral risk group *per se*, the Strategies and Interventions Committee recommended that it would be more useful to the HIV prevention field to offer guidance about the effectiveness and suggested uses of interventions with various risk groups. The Strategies and Interventions Chapter contained a definition, standards for service provision, expected outcomes, suggested uses, and a summary of effectiveness information for 14 strategies and interventions. The Priority-Setting Committee developed a matrix that estimated the level of risk for each behavioral risk group using an estimated frequency of risk behavior, the degree of risk that each behavior presents, estimated prevalence of HIV in that San Francisco behavior population, and the size of the population. This matrix provided a prioritization or ranking of behavioral risk populations. Additionally, the Committee identified 17 social or psychological factors that may influence risk behavior, called co-factors. The prioritized behavioral risk populations and a description of the ways in which co-factors influence risk were published in the Priority-Setting Chapter, issued simultaneously with the Strategies and Interventions Chapter at the end of 1995.

The CDC Cooperative Agreement application was prepared and submitted as required. That application contained the draft plan chapters (Priority-Setting and Strategies and Interventions) as well as a formal presentation of the HIV Prevention Planning Council approved behavioral risk populations in priority order. In addition, it indicated that actual implementation of the HIV Prevention Plan priorities was being deferred until 1996 in order to lay a sufficient base for a focus on behavior change among prevention providers. These additional chapters, like the 1995 prevention plan, received praise from the CDC and other planning bodies throughout the country.

The third year of planning began in 1996. The Council met once or twice a month during the year, holding 16 meetings. Six committees were established. Exhibit 6.1 shows the committees that were active in each of the three years.

Membership Committee - revise the bylaws as necessary, refine the statement of roles and responsibilities of the HPPC, develop recommendations for the recruitment and retention of

HPPC members, develop procedures for guiding member and community involvement and participation in meetings.

Goals and Objectives Committee - review progress on goals and objectives developed in 1994, develop new objectives for the HPPC and prevention providers in San Francisco.

Epidemiology and Research Committee - review the 1995 Epidemiological Profile, provide guidance for the updated Profile, and develop a prioritized list of behavioral and prevalence studies.

Resource Allocation/Resource Inventory Committee - determine guidelines for the request for proposals, serve as representatives in the review of funding proposals along with other HPPC members if there is no conflict of interest, assess the resource allocation process, and revise the resource inventory structure.

Linkages Committee - assess existing linkages systems, define guidelines for a system of referrals among HIV prevention providers, HIV care providers, and social services organizations, develop guidelines for effective collaborations between HIV prevention providers.

Evaluation and Technical Assistance Committee - Guide the work conducted by consultants employed through the Organizational Development and Capacity Building and Technical Support contracts of the AIDS Office in the development of a strategic plan for the evaluation of DPH and CBO prevention programs, the standardization of units of service and socio-demographic characteristics; develop recommendations for implementation of the city-wide evaluation and technical assistance to prevention providers.

More information about the work of each committee is included in each of the following chapters. At the end of 1996, this updated Plan was issued, representing the planning efforts of all three years. The AIDS Office application to the CDC was based on the priorities of the Plan and was submitted in October 1996.

Exhibit 1.1
HPPC Committees, 1994 - 1996

Year 1 1994	Year 2 1995	Year 3 1996
Epidemiology and Needs Assessment		Epidemiology and Research
Strategies and Interventions	Strategies and Interventions	
Goals and Objectives		Goals and Objectives
Criteria for Priority-Setting	Priority-Setting	Resource Allocation /Resource Inventory
Technical Assistance and Linkages		Evaluation and Technical Assistance
		Linkages
		Membership

Support for Planning

Participatory community planning is an arduous task. It requires a great many hours for Council members to review information, consider and debate the issues, and form recommendations. The volunteer hours given by Council members are best used in policy-making and guidance of large efforts rather than in administrative tasks such as note taking. Therefore, substantial support was provided to the Council members to ease their administrative tasks and to gain most benefit from their conceptual thinking. In addition to administrative support, the HPPC was also given guiding support from its own membership, the AIDS Office, and technical consultants. The types of support are outlined below and summarized in Exhibit 1.2.

First, the AIDS Office HIV Prevention Planning, Policy, and Health Education Unit provided the Council and each committee with one or more staff. Staff prepared Council agendas; initiated and monitored contracts for technical, logistical, and evaluation support; and took care of the administrative work necessary to enable the Council to function. Additionally, particularly in Year 3, AIDS Office staff outside of this unit, such as program managers and epidemiologists, participated on committees. Certain staff were assigned as committee members and had voting privileges on the committee (although not on the Council); other staff were assigned as support personnel and assisted the committees in carrying out tasks such as collecting information.

Second, the AIDS Office issued a contract to provide the Council with technical and logistical support services. In the first year, these services were provided by the Support Center of San Francisco, and in the two subsequent years by a collaboration between Polaris Research and Development, Inc. and Harder+Company Community Research. Logistical support consists of tasks related to the occurrence of meetings: the preparation and distribution of meeting minutes, the provision of food and beverages, and the maintenance of a monthly calendar of meetings and other pertinent events. Technical support consists of three types of activities:

1) providing guidance to the planning process (including guidance to the AIDS Office, the Co-Chairs, the Steering Committee and individual committees); 2) providing technical support to the Council and its committees including researching and collecting information, and preparing reports; and 3) preparing (including writing) the full Plan and supplemental chapters.

Third, the Council received the support of evaluation consultants who not only conducted a year-end process evaluation, but also provided feedback and process assistance throughout the year. The process evaluation team distributed, collected, and reported on brief surveys of membership about a number of issues (including the accomplishments of each Council meeting and reasons for members, absences at critical Council meetings), and prepared/distributed evaluation tools at each Council meeting. Feedback from the evaluation consultants provided an important checkpoint for both Council Co-Chairs and staff regarding progress, possible impediments, and issues of concern.

One committee, the Evaluation/Technical Assistance Committee, was supported in the third year by a collaboration of consultants procured by the AIDS Office. The collaboration included the Support Center (for a city-wide organizational needs assessment among prevention providers) and Polaris and Harder+Company (for the development of a strategic plan for city-wide evaluation of interventions). The consultants engaged in the technical aspects of the needs assessment and development of a strategic evaluation plan, with guidance from the Committee; the Committee then used this information to develop recommendations.

In addition, the Council established a structure whereby it received support and guidance from its own membership. The Council Co-Chairs met several times per month to coordinate activities and provide guidance to the Council. They formulated the Council agenda, telephoned absent members, guided the nomination process for new members, facilitated Council meetings, and participated on committees. The Steering Committee, formed in the third year, was comprised of the chairs of each committee, and it met once a month to discuss the Council agenda, engage in problem-solving, and begin the work of better delineating the roles and responsibilities of the Council and the AIDS Office.

Exhibit 1.2
HPPC Support, 1994 - 1996

	Year 1 1994	Year 2 1995	Year 3 1996
Co-Chairs	3	3	2 then 3
Steering Committee	no	no	yes
AO Staff	yes	yes	yes
Logistical Support	Support Center	Polaris	Polaris
Technical Support	Support Center	Harder+Co.	Harder+Co.
Process Evaluation	Dr. Kathleen Roe	none	Dr. Kathleen Roe
Committee-Specific			Support Center, et al.
Consultants			Polaris/Harder+Co.

Council Membership

The Centers for Disease Control provide guidance about the selection and composition of members. Section D, Principles of HIV Prevention Community Planning, states that:

HIV Prevention Community Planning is characterized by shared priority-setting between organizations administering and awarding HIV prevention funds and the communities for whom the prevention services are intended. Each grantee is required to identify at least one HIV Prevention Community Planning group which reflects in its composition the characteristics of the current and projected epidemic in that jurisdiction. Other members of the planning group should include scientific experts, service providers, and organizational representatives as delineated later in Section E [below]. Nominations for membership are identified through an open process and candidates are selected based on criteria delineated in the application request for HIV community planning funds. In addition, the recruitment process for membership in the HIV Prevention Community Planning process is proactive to ensure that socioeconomically marginalized groups, and groups that are underserved by existing HIV prevention programs, are represented.

Section E, Logistics of HIV Prevention Community Planning, states that grantees (AIDS Office) will be responsible for developing criteria for selecting the individual members of the HIV Prevention Community Planning group within their jurisdiction.

The HIV Prevention Community Planning process must include representatives who reflect the population characteristics of the current and projected HIV/AIDS epidemic in that jurisdiction as indicated by reported AIDS cases, HIV data, if available; and other relevant surrogate markers, in terms of age, gender, race/ethnicity, socioeconomic status, geographic distribution, sexual orientation, and HIV exposure category. In addition to reflecting the population

characteristics outlined above, it is important that these representatives articulate for and have expertise in understanding and addressing the specific HIV prevention needs of the populations they represent. Representation should also include:

- a) state and local health departments, state and local education agencies and other relevant governmental agencies (substance abuse, mental health, corrections);*
- b) experts in epidemiology, behavioral and social sciences, evaluation research and health planning; and*
- c) representatives of a sample of nongovernmental and governmental organizations providing HIV prevention and related services (e.g., STD, TB, substance abuse prevention and treatment, mental health services, HIV care and social services, etc.) to persons at risk for HIV infection or already infected.*

The HIV Prevention Community Planning process should attempt to accommodate a reasonable number of representatives without becoming so large that it cannot effectively function. HIV Prevention Community Planning groups are encouraged to seek additional avenues for obtaining input on community HIV prevention needs and priorities, such as holding well-publicized public meetings, conducting focus groups, and convening ad hoc panels.

With this Guidance in mind, the HPPC established in its first bylaws a maximum of 37 positions. Two of these positions are appointed for indefinite terms, and the rest are recruited through open nomination. The appointed representatives with indefinite terms are from the State of California Office of AIDS, and the San Francisco Department of Public Health (Council Co-Chair). The representatives recruited through open nomination include:

- a) individuals affected by HIV;
- b) individuals infected with HIV;
- c) representatives of non-governmental/community organizations providing HIV prevention and related services and the affected communities;
- d) experts in epidemiology, behavioral and social sciences, evaluation, research, and health planning;
- e) SF Division of Mental Health, Substance Abuse and Forensics; and
- f) SF Department of Public Health Community Health Services Division;
- g) SF Unified School District

These positions are expected to be filled by no more than ten governmental representatives, no more than seven technical experts, up to ten non-governmental representatives, and up to ten community representatives. Beginning in the second and continuing into the third year of planning, there have been a minimum of three, and preferably

five, positions reserved for youth (age 24 or younger), and one position reserved for a transgender individual. A minimum of two, and preferably four, positions for researchers and technical experts are reserved. Additionally, the selection process attempts to achieve an overrepresentation by African Americans, Latina/os, and gay men and lesbians. In order to meet CDC requirements, attempts are made to recruit a representative from Substance Abuse Services, STD Control, and Mental Health.

The following table shows the composition of the Council each year. Due to resignations and attrition, new members may have been appointed mid-year and thus the table reflects the membership only at one point in time.

Exhibit 1.3
Composition of Council - 1994 - 1996

	1994 ² 37 members	1995 ³ 37 members	1996 ⁴ 36 members
Ethnicity			
African Am	9	9	8
Asian/Pac. Is.	6	6	5
Latina/o	7	7	4
Native Am.	2	3	3
White	13	12	12
Gender			
Female	16	18	18
Lesbian			9
Bisexual			2
Heterosexual			7
Males	20	18	17
Gay	15	13	14
Bisexual		3	1
Heterosexual		2	2
Transgender	1	1	1
MTF	1	1	
FTM			1
HIV-positive	4	6	8
Youth (<25)	5	6	7
Affiliation/Expertise			
Research	6	6	2
DPH	8	6	5
Schools	1	1	1
Mental Health	0	0	0
Substance Abuse ⁵	9	6	1
Community based	22	22	22
organization			
Community/non-			
affiliated	3	2	5

² Initial membership.

³ As of August 1, 1995 - at submission of CDC Application.

⁴ As of July 1, 1996 - at submission of CDC Application.

⁵ Substance Abuse Specialty - may include organizations other than Community Substance Abuse Services.

Council Governance

The CDC Guidance⁶ set out an overview of the planning principles and basic components, which the HPPC used as the foundation of its governance. The Council then developed several more documents of governance. These are outlined below, and presented as attachments to this chapter.

- San Francisco **HIV Prevention Planning Council Bylaws** have been revised several times since their original adoption by the Council. The bylaws outline the purpose of the Council, its membership composition, procedures for nominations, procedures for appointments and termination/resignations, the operating procedures, (specifically with regard to Co-Chairs and the use of parliamentary procedure); meeting procedures, (frequency, quorum, voting, and so forth), a conflict of interest statement, conflict resolution procedures, and methods for amending the bylaws. With the establishment of the Membership Committee in 1996, the responsibility of developing amendments for Council adoption falls to that Committee. (See Attachment 2 at the end of this chapter.)
- In 1996, the Membership Committee revised **Meeting Participation Guidelines** previously developed in 1994. This document states HPPC expectations about group involvement and offers guidelines for a fair, inclusive process. It outlines levels of participation by advisors/technical consultants, AIDS Office staff, and members of the community. It establishes ground rules for behavior during committee and Council meetings which balance process (the need for participation and inclusion and focus on the quality of the experience for HPPC members) with efficiency (the need to deliver quality output in time to meet deadlines). (See Attachment 3 at the end of this chapter.)
- **Procedures for Public Comment** were refined in 1996 by the Membership Committee. These procedures are intended to establish a process by which members of the public may make statements to the Council on any topic. Co-Chairs use these procedures at each Council meeting. (See Attachment 4 at the end of this chapter.)
- **Responsibilities of Committee Members** is a document developed by the Co-Chairs at the end of 1995 (Year 2) in preparation for Year 3 planning work. The responsibilities of committee members and committee chairs are listed. This document was distributed and discussed at the first meeting of each committee as part of an orientation. (See Attachment 5 at the end of this chapter.)
- **Roles and Responsibilities of HPPC and AO** is a document in the initial stages of development by the Co-Chairs and Steering Committee. Preparation of this document represents a significant step forward in relationships between the HPPC and the AIDS Office. Ambiguities in the Council Bylaws and other governing documents have led to confusion as to who has what responsibility in what situation. Through a series of

⁶ Attachment 1 of this chapter.

discussions and problem-solving sessions, these ambiguities are being resolved and clarified. It is anticipated that a statement of roles and responsibilities will be forthcoming in the near future.

Council Operations

Council meetings were convened once or twice a month to conduct planning and other activities. (In addition, the Co-Chairs met almost weekly, the Steering Committee met monthly, and each committee met as often as necessary—usually once or twice monthly.) The responsibility for chairing the full Council meetings rotated among the three Co-Chairs. The agenda for each meeting was developed by the Co-Chairs and revised by the Steering Committee. At each meeting, time was given at the beginning to introductions, approval of minutes, announcements, Steering Committee report, and public comment, and at the end to meeting evaluation. During the main part of the meeting Council members dealt with both planning activities and non-planning activities necessary to the operation of the Council. The planning activities included reports on the progress of committee work, presentations of preliminary committee recommendations for a “concept vote,” and presentation of final committee recommendations for Council adoption by majority. Examples of other activities of the Council included approving letters of support for research studies, receiving reports of progress on research studies, discussing issues related to the ways in which the AIDS Office implemented Council recommendations, and approving the AIDS Office application for funding to the Centers for Disease Control.

The results of the Council planning efforts are portrayed in this prevention plan. The following list shows the sequential order of prevention planning recommendations adopted by the Council.

1996	Planning Recommendations
February	• Committees receive orientation on committee tasks and timelines.
March	• Council receives updates from each committee.
April	<ul style="list-style-type: none"> • Council elects second community Co-Chair. • Council recommends that there be some set-aside funds for select, as yet undetermined, prevention activities for 1997. • With amendments, HPPC approves 1996 Goals and Objectives developed by the Goals and Objectives Committee. • Council votes concept support for the direction of the Goals and Objectives Committee for the 1997 Prevention Goals and Objectives. • Votes concept support for the direction of recommendations on the characteristics of effective collaborations by the Linkages Committee. • Votes concept support for the direction of the Evaluation/Technical Assistance Committee’s recommendation for a one-time risk assessment survey of target populations.
May	• Council votes to accept the Goals and Objectives Committee’s recommended Prevention Goals for 1997.

1996	Planning Recommendations
	<ul style="list-style-type: none"> • Council votes to accept the Linkages Committee's recommended "Required Elements of Proposed Collaborations" (with further change made in June). • Council votes to accept the Resource Allocation/Resource Inventory Committee's recommendations for "Resource Allocation Process." • Council does not adopt Committee recommendation to set aside funding for street outreach collaboration; with this amendment, Council votes to adopt the recommendations for set-aside funding for select prevention activities. • With amendment, Council votes to adopt the Evaluation/Technical Assistance Committee's recommendation for a one-time behavioral risk assessment (with final vote in June). • Council approves bylaw changes recommended by Membership Committee.
June	<ul style="list-style-type: none"> • Council provides to AO input on bidding/sole-sourcing, contract stipulations, and funding levels for Council-approved set-aside activities. • Council votes to approve proposed addition to Linkage Committee's "Required Elements of Proposed Collaborations." • Council votes to approve Resource Allocation/Resource Inventory Committee's "Criteria for Applicants' Prevalence and Risk Behavior Data." • Council votes to approve the Evaluation/Technical Assistance Committee's recommendations for proposed one-time risk assessment requirements.
August	<ul style="list-style-type: none"> • Council approves the concepts for the 1997 Cooperative Agreement Application Goals and Objectives. • Council votes to approve Goals and Objectives for the 1997 CDC Application. • Council gives concept approval of draft 1997 HPPC Process Objectives. • Council votes to approve, with minor revisions, the Evaluation/Technical Assistance Committee's recommended Principles for Allocation of TA Resources. • Council votes to approve "Principles Guiding Strategic Evaluation Plan Objectives" developed by the Evaluation/Technical Assistance Committee. • Council votes to approve (with minor amendments) the Epidemiology/Research Committee's recommended priority list for future studies within each priority level developed by the Evaluation/Technical Assistance Committee. • Council votes concept approval for the "Recommendations for Linkages and Referrals."
September	<ul style="list-style-type: none"> • Council votes to approve, with minor revisions, the 1997 HPPC Goals and Objectives.
November	<ul style="list-style-type: none"> • Council votes to approve 1997 HPPC Process Objectives developed by the Goals and Objectives Committee. • Council votes for the "Recommendations for Linkages and Referrals" developed by the Linkages Committee. • Council votes to adopt the "Resource Inventory" design developed by the Resource Allocation/Resource Inventory Committee. • Council votes to adopt the "Procedures for Obtaining HPPC Letters of

1996	Planning Recommendations
	Support for Research Studies” developed by the Epidemiology and Research Committee.
	• Council votes to adopt changes in the bylaws related to membership terms and two month provisional period for new members and including the Chief of Health Services and Prevention Branch of the AIDS Office as an <i>ex officio</i> member of the Council. Council does not adopt other recommendations developed by the Membership Committee regarding lowering the quorum.
December	• Council adopts the 1996 SF HIV Prevention Plan.

The above listing indicates both the volume and range of recommendations made by the HPPC in 1996. The HPPC is a dedicated, committed body of individuals that has undertaken an enormous task of examining the ways in which HIV prevention occurs as compared to an ideal - and then attempts to move prevention in San Francisco towards the ideal. The remaining chapters of this prevention plan show the HPPC’s vision of about quality HIV prevention practices from a city-wide, comprehensive planning perspective. The remainder of this chapter describes the work of the Membership Committee, a committee whose task on the Council was unique in that it focused more on the Council’s process than its product.

II. MEMBERSHIP COMMITTEE

Committee Membership

When initially formed in March, 1996, the Membership Committee consisted of seven members. Two of these were Council members, three were community members (and former HPPC members), and one was the DPH Co-Chair. Committee membership evolved with attrition and replacement, and the composition of the committee at the end of the year was five members, one HPPC member, two community members, the DPH Co-Chair and one of the Community Co-Chairs. The committee benefited from the participation of an AIDS Office staff member who is familiar with parliamentary procedures and the formation of bylaws. Throughout the year, the committee received support from this AIDS Office staff member and one of the Process Evaluation consultants. In the summer, the committee identified the need for Technical Support and in September, one of the Technical Support consultants began working with the Committee.

Decision Making Process

Decisions at the Committee level were made through discussion and consensus/vote. Generally, the Committee worked on one issue at a time - first the bylaws, then guidelines for participation, and the annual retreat; however, suggestions for retaining Council members occurred at every meeting throughout the year. The Committee formulated recommendations which were then presented to the Council for initial consideration and later a vote.

Tasks of the Committee

Initial guidance for the committee work came from the HPPC Co-Chairs. The Membership Committee was to: 1) outline specific roles and responsibilities of HPPC members, Committee and Co-Chairs; 2) refine the procedures for gaining input from the community; 3) assist in the orientation and training of new members; and 4) assist in the recruitment and retention of HPPC members. The Committee was also asked to develop procedures for guiding member and community involvement/participation in meetings.

The Committee completed all these tasks, although most of the issues need continual attention, such as training and orientation of new members, retention of current members, and refining the roles and responsibilities of members. In 1996, the Committee:

- Revised the bylaws, notably sections regarding membership term and recruitment;
- Developed Membership Participation Guidelines (see Attachment 3 at end of chapter);
- Developed Responsibilities of Committee Members and Chairs (see Attachment 4 at end of chapter);
- Developed guidelines for public comment (see attachment 5 at end of chapter);
- Planned a membership retreat on July 25, 1996; and
- Developed recommendations to retain members.

The work of this Committee, more than any other committee, flows from one year to the next. There is no clear delineation of planning years as there is for other committees with specific planning tasks to accomplish within the year. The Council membership needs ongoing focus and improvements in policies and procedures to support its membership.

III. SUMMARY AND IMPLICATIONS

Community participatory planning represents a new direction by the Centers for Disease Control and Prevention (CDC) in the way states and high-incidence cities are funded by the federal government for HIV prevention. Across the nation, health jurisdictions are obligated to work with community representatives to develop a plan for prioritizing prevention efforts. In San Francisco, the AIDS Office was eager to involve the community in a planning process. The AIDS Office and HPPC established an intensive planning effort that has enormous implications for San Francisco prevention programs and ultimately for all people at risk for HIV in the city. While the first two years involved developing a new paradigm for HIV prevention (described in subsequent chapters), the third year represented the start of an implementation phase of the planning process. In the third year, recommendations made by committees in all three years were used as guidance for the development of a request for proposals for HIV prevention. The fourth year will present new opportunities to continue the implementation and begin to evaluate the effects of these efforts in the field.

The Membership Committee plays a unique role on the Council. The core issues of the Committee center on how the Council conducts business and supports members, rather than on

what specific recommendations the Council makes. In holding this focus, the Committee continues to develop recommendations to enhance member participation. Since the committee focus is on ways to best support members, its task is not finite, not completed at the end of the year. Rather, the Membership Committee's role continues to evolve and re-form.

In the upcoming year (1997), the Membership Committee will continue to identify and address key issues of Council representation, inclusion, and parity. Based on experiences of 1996, the Committee will particularly examine new methods of retaining members in order to reduce the turnover in membership during the year. Additionally, the Committee will be involved in supporting the HPPC process by planning the annual retreat and assisting in the orientation of new members. These and other activities help balance process—the need for participation and inclusion and a focus on the quality of the experience for HPPC members—with efficiency—the need to deliver quality output in time to meet deadlines.

Attachment 1

SUPPLEMENTAL GUIDANCE ON HIV PREVENTION COMMUNITY PLANNING FOR NONCOMPETING CONTINUATION OF COOPERATIVE AGREEMENTS FOR HIV PREVENTION PROJECTS

INTRODUCTION

This guidance is offered to assist state and local health department HIV Prevention Cooperative Agreement grantees (referred to in subsequent portions of this document as “Grantees”) in the preparation of plans to undertake HIV Prevention Community Planning in fiscal year (FY) 1994 and subsequent fiscal years. The Centers for Disease Control and Prevention (CDC) will award approximately \$12,000,000 in new funds for the FY 1994 planning process through the HIV Prevention Cooperative Agreements with state, territorial, and local health departments on or about January 15, 1994. These funds will be used to establish plans for the use of HIV prevention resources awarded under program announcement #300 (Cooperative Agreement for Human Immunodeficiency Virus [HIV] Prevention Projects Program Announcement and Availability of Funds for Fiscal Year 1993).

A. ESSENTIAL COMPONENTS OF A COMPREHENSIVE HIV PREVENTION PROGRAM

Participatory community planning is an essential component of effective HIV prevention programs. This type of planning is evidence-based (i.e., based on HIV/AIDS epidemiologic surveillance and other data, ongoing program experience, program evaluation, and a comprehensive, objective needs assessment process) and incorporates the views and perspectives of the groups at risk for HIV infection/transmission for whom the programs are intended, as well as the providers of HIV prevention services. In addition to community planning, the other essential components of a comprehensive HIV prevention program are (also see program announcement #300):

1. Epidemiologic and behavioral surveillance and research and collection of other health and demographic data to monitor the HIV/AIDS epidemic and behaviors/practices that facilitate HIV transmission and to project trends in the epidemic;
2. HIV counseling, testing, referral, and partner notification (CTRPN) to provide, consistent with state laws, both anonymous and confidential client-centered opportunities for individuals to learn their serostatus and to receive prevention counseling and referral to other preventive, medical, and social services;
3. Individual level interventions (e.g., prevention case management) that provide ongoing health education and risk-reduction counseling, assist clients in making plans

for individual behavior change and ongoing appraisals of their own behavior, facilitate linkages to services in both clinic and community settings (e.g., substance abuse treatment settings) in support of behaviors and practices which prevent transmission of HIV, and to help clients make plans to obtain these services;

4. Health education and risk-reduction interventions for groups to provide peer education and support, as well as to promote and reinforce safer behaviors and provide interpersonal skills training in negotiating and sustaining appropriate behavior change;
5. Community level interventions for populations at risk for HIV infection that seek to reduce risk behaviors by changing attitudes, norms, and practices through health communications, social (prevention) marketing, community mobilization/organization, and community-wide events;
6. Public information programs for the general public that seek to dispel myths about HIV transmission, support volunteerism for HIV prevention programs, reduce discrimination toward individuals with HIV/AIDS, and promote support for strategies and interventions that contribute to HIV prevention in the community;
7. Evaluation and research activities necessary to conduct formative, process, and outcome evaluations of HIV prevention programs and to assess the cost-effectiveness and cost-benefits of strategies and interventions; and
8. HIV prevention capacity-building activities, such as strengthening governmental and nongovernmental public health infrastructure in support of HIV prevention, implementing systems to ensure the quality of services delivered, and improving the ability to assess community needs and provide technical assistance in all aspects of program planning and operations.

B. DEFINITION OF HIV PREVENTION COMMUNITY PLANNING

HIV Prevention Community Planning refers to an ongoing process whereby grantees share responsibilities for developing a comprehensive HIV prevention plan with other state/local agencies, nongovernmental organizations, and representatives of communities and groups at risk for HIV infection or already infected. Priority-setting accomplished through a participatory process will result in programs that are responsive to high priority, community-validated needs within defined populations. HIV prevention programs developed without community collaboration are unlikely to be successful in preventing the transmission of HIV infection or in garnering the necessary public support for effective implementation. Persons at risk for HIV infection and persons with HIV infection should play a key role in identifying prevention needs not adequately being met by existing programs and in planning for needed services that are culturally appropriate. The necessary steps of HIV Prevention Community Planning are:

1. Assessing the present and future extent, distribution, and impact of HIV/AIDS in defined populations in the community;
2. Assessing existing community resources for HIV prevention to determine the community's capability to respond to the epidemic. These resources should include fiscal, personnel, and program resources, as well as support from public (Federal, state, county, municipal), private, and volunteer sources. This assessment should identify all HIV prevention programs and activities according to defined high-risk populations;
3. Identifying unmet HIV prevention needs within defined populations;
4. Defining the potential impact of specific strategies and interventions to prevent new HIV infections in defined populations;
5. Prioritizing HIV prevention needs by defined high-risk populations and by specific strategies and interventions;
6. Developing a Comprehensive HIV Prevention Plan consistent with the high priority HIV prevention needs identified through the HIV Prevention Community Planning process; and
7. Evaluating the effectiveness of the planning process.

The grantee will develop an application for CDC FY 1995 (and beyond) funding based on the Comprehensive HIV Prevention Plan.

C. ELEMENTS OF A COMPREHENSIVE HIV PREVENTION PLAN

The necessary elements of a comprehensive HIV prevention plan include the following:

1. An HIV/AIDS epidemiologic profile that reflects the current and future epidemic in that jurisdiction (e.g., reported AIDS cases, projected AIDS cases, estimated HIV prevalence in defined populations, HIV incidence, HIV risk behaviors, and other information—such as sexually transmitted diseases (STDs), teen pregnancy, and drug use—needed to target and monitor HIV prevention efforts).
2. A description of target populations to be reached by primary HIV prevention interventions (i.e., by age group, gender, race/ethnicity, socioeconomic status, geographic area, sexual orientation, exposure category, primary language, and significant cultural factors) and a description of unmet needs and barriers in reaching populations.

3. A description of priority individual-, group-, and community-level strategies and interventions that are culturally and linguistically appropriate for defined target populations whose serostatus is unknown, negative, or positive. These strategies and interventions include HIV counseling, testing, referral, and partner notification; prevention case management and other one-on-one risk reduction prevention programs; peer education programs for high-risk populations; school-based programs; community mobilization; and health communications and social (prevention) marketing approaches. Both existing and proposed interventions should be described.
4. A description of how primary HIV prevention activities are linked to secondary HIV prevention activities, i.e., activities to prevent or delay the onset of illness in persons with HIV infection.
5. Goals and measurable objectives that are programmatically meaningful for HIV prevention in defined populations. These goals and objectives should be developed for both the short-term (budget period) and the long-term (project period).
6. A description of other HIV prevention-related activities (e.g., epidemiologic and behavioral surveillance, research, and program evaluation activities) and how these are linked to HIV and other prevention program strategies in the geographic area for which the plan is developed.
7. A description of how public and nongovernmental agencies will coordinate within the area for which the plan is developed to provide HIV prevention services and programs.
8. An HIV prevention technical assistance plan identifying needs of grantees and community-based providers in the areas of program planning, implementation, and evaluation.
9. An evaluation plan for the HIV prevention planning process as delineated in Item 13 of Section D.

D. PRINCIPLES OF HIV PREVENTION COMMUNITY PLANNING

State health departments are responsible for the health of the populations in their jurisdictions. States have a broad responsibility in surveillance, prevention, overall planning, coordination, administration, fiscal management, and provision of essential public health services. States recognize, however, that governmental agencies alone are limited in their scope and ability to solve complex health, social, economic, and environmental problems. Thus, in planning for prevention services, other state and local government agencies (substance abuse, mental health, education, and corrections), nongovernmental agencies, community representatives, and academic institutions must play a key role in identifying unmet needs. Representatives of communities at risk for HIV infection can provide invaluable personal and

population-specific perspectives on accessibility and cultural appropriateness of specific prevention interventions.

Although different approaches to community planning may be taken in various communities, grantees will be required to address the following principles in all HIV Prevention Community Planning efforts supported by HIV Prevention Cooperative Agreement funds from CDC in FY 1995 and beyond:

1. HIV Prevention Community Planning represents an ongoing process involving the steps delineated in Section B.
2. HIV Prevention Community Planning reflects an open, candid, and participatory process, in which differences in background, perspective, and experience are essential and valued.
3. HIV Prevention Community Planning is characterized by shared priority-setting between organizations administering and awarding HIV prevention funds and the communities for whom the prevention services are intended.
4. Each grantee is required to identify at least one HIV Prevention Community Planning group (consideration should be given to the use of planning bodies/processes already in place) which reflects in its composition the characteristics of the current and projected epidemic in that jurisdiction (as evidenced in reported AIDS cases; HIV data, if available; and/or relevant surrogate markers). Other members of the planning group(s) should include scientific experts, service providers, and organizational representatives as delineated in Section E.
5. Nominations for membership are identified through an open process and candidates are selected based on criteria delineated in the application request for HIV community planning funds. In addition, the recruitment process for membership in the HIV Prevention Community Planning process is proactive to ensure that socioeconomically marginalized groups, and groups that are underserved by existing HIV prevention programs, are represented.
6. From the outset, all members of the HIV Prevention Community Planning group(s) understand the roles and responsibilities as outlined in this guidance and agree to the procedures and ground rules used in all deliberations and decision making.
7. The starting point for defining future HIV prevention needs begins with an accurate epidemiologic profile of the present and future extent, distribution, and impact of HIV/AIDS in defined targeted populations within the grantee's jurisdiction. In defining at-risk populations, special attention should be paid to distinguishing the behavioral, demographic, and racial/ethnic characteristics.

8. Identification, interpretation, and prioritization of HIV prevention needs reflect culturally relevant and linguistically appropriate information obtained from the communities to be served, particularly persons at risk for HIV infection and persons with HIV disease.
9. Assessment of HIV prevention needs is based on a variety of sources (both qualitative and quantitative), is collected using different assessment strategies (e.g., surveillance; survey; formative, process, and outcome evaluation of programs and services; outreach and focus group(s); public meetings), and incorporates information from both providers and consumers of services. Techniques such as oversampling may be needed to collect valid information from certain at-risk populations.
10. Priority-Setting for specific HIV prevention strategies and interventions is based on the following criteria:
(a) documented HIV prevention needs based on the current and projected impact of HIV/AIDS in defined populations in the grantee's jurisdiction; (b) outcome effectiveness of proposed strategies and interventions (either demonstrated or probable); (c) cost effectiveness of proposed strategies and interventions (either demonstrated or probable); (d) sound scientific theory (e.g., behavior change, social change, and social marketing theories); (e) values, norms, and consumer preferences of the communities for whom the services are intended; (f) availability of other governmental and nongovernmental resources (including the private sector for HIV prevention); and (g) other state and local determining factors. Each criterion should be formally considered by the HIV Prevention Community Planning group(s) during priority-setting deliberations.
11. Resources are provided to support all steps in the community planning process as listed in Section B, including facilitating the involvement of all participants in the planning process, particularly those persons at risk for HIV infection and persons with HIV disease.
12. Specific policies and procedures for resolving disputes and avoiding conflict of interest identified by the grantee or the planning group(s) are consistent with the principles of this guidance, and are developed with input from all parties. These policies and procedures address conflict(s) of interest for members of the planning group(s) as well as disputes within and among planning group(s), differences between the planning group(s) and the grantee in the prioritization and implementation of programs/services, and a process for resolving these disputes in a timely manner when they occur.
13. The HIV Prevention Community Planning process includes the following evaluation components throughout the course of the project period: (a) developing goals and measurable objectives for the planning process; (b) monitoring the objectives; (c) evaluating the operation of the process; (d) evaluating the impact of the planning process; and (e) assessing the cost of the process.

These principles trace their origins to: ongoing HIV prevention program assessments conducted by CDC staff; CDC's Planned Approach to Community Health (PATCH) program;

CDC's Assessment Protocol for Excellence in Public Health (APEX/PH) project; the ASTHO/NASTAD/CSTE State Health Agency Vision for HIV Prevention; findings of CDC's 1993 HIV external review process; experience and recommendations of health departments and nongovernmental organizations; and the health promotion, community development, and behavioral/social sciences literature.

E. LOGISTICS OF HIV PREVENTION COMMUNITY PLANNING

Beginning in FY 1994, applicants for cooperative agreement funds under program announcement #300 will be required to adhere to the principles of HIV Prevention Community Planning outlined in this document. Each recipient of cooperative agreement funds under this announcement will be required to base its funding application for FY 1995 on the results of an HIV Prevention Community Planning process that will be implemented in FY 1994. Grantees are expected to base subsequent applications on this ongoing community planning process.

In FY 1994, supplemental funds are being provided through this program announcement to specifically support HIV Prevention Community Planning. These funds should be used to (a) support planning group meetings, public meetings, and other means for obtaining community input; (b) support capacity development for parity, inclusion, and representation of community representatives and for other members of planning groups to participate effectively in the process; (c) provide technical assistance to health departments and community planning groups by outside experts; (d) support planning infrastructure for the HIV community planning process; and (e) collect and/or analyze and disseminate relevant data. The distribution of planning funds within these five categories should be determined jointly by the HIV Prevention Community Planning Group and the grantee (also see Section H).

All grantees directly receiving funds under cooperative agreement #300 will be required to conduct HIV Prevention Community Planning in FY 1994. Grantees will be required to determine how best to achieve and integrate statewide, regional, and community planning within their jurisdictions. Grantees must collaborate with governmental and nongovernmental organizations and affected communities to determine the most effective mechanisms for input into the HIV Prevention Community Planning process. Identification of these mechanisms should be based on a dialogue between the state and local public health agencies and the community. The process must be structured in such a way that it incorporates and addresses needs and priorities identified at the community level (i.e., the level closest to where the problem is identified). Models for obtaining input *include but are not limited to* a state-wide planning model, a regional planning model, a Metropolitan Statistical Area planning model, and/or existing planning bodies.

Grantees will be responsible for developing criteria for selecting the individual members of the HIV Prevention Community Planning group(s) within their jurisdiction. State grantees should involve local public health authorities and leaders of affected communities in developing such criteria; local grantees should similarly involve state health authorities and leaders of affected communities in developing such methods. Special emphasis should be placed on

procedures for identifying representatives of socioeconomically marginalized groups and groups that are underserved by existing HIV prevention programs.

The HIV Prevention Community Planning process must include representatives who reflect the population characteristics of the current and projected HIV/AIDS epidemic in that jurisdiction as indicated by reported AIDS cases, HIV data if available; and other relevant surrogate markers, in terms of age, gender, race/ethnicity, socioeconomic status, geographic distribution (e.g., special needs of small MSA or rural populations), sexual orientation, and HIV exposure category. In addition to reflecting the population characteristics outlined above, it is important that these representatives articulate and have expertise in understanding and addressing the specific HIV prevention needs of the populations they represent. Representation should also include (a) state and local health departments, state and local education agencies and other relevant governmental agencies (substance abuse, mental health, corrections); (b) experts in epidemiology, behavioral and social sciences, evaluation research, and health planning; and (c) representatives of a sample of nongovernmental and governmental organizations providing HIV prevention and related services (e.g., STD, TB, substance abuse prevention and treatment, mental health services, HIV care and social services, etc.) to persons at risk for HIV infection or already infected. The HIV Prevention Community Planning process should attempt to accommodate a reasonable number of representatives without becoming so large that it cannot effectively function. HIV Prevention Community Planning group(s) are encouraged to seek additional avenues for obtaining input on community HIV prevention needs and priorities, such as holding well-publicized public meetings, conducting focus groups, and convening ad hoc panels.

HIV Prevention Community Planning group(s) should have access to current information related to HIV prevention from evaluation of programs and the behavioral and social sciences, especially as it relates to the at-risk population groups within a given community. Planning group members should also be routinely updated about relevant new findings of behavioral and social scientists.

Every CDC grantee receiving funding under program announcement #300 is responsible for identifying a health department employee, or a designated representative, to co-chair each HIV planning group in the project area; if state grantees implement more than one planning group within their jurisdiction, they may wish to designate local health department representatives as co-chairs of these planning groups. The group, once convened, selects the other co-chair.

The HIV Prevention Community Planning Group(s) should be routinely informed by the grantee of other relevant planning efforts, particularly the process for allocating Titles I, II, and IIIb of the Ryan White Comprehensive AIDS Resources Emergency Act. Grantees should consider merging the HIV Prevention Community Planning process with other planning bodies/processes already in place. *If such mergers are undertaken, grantees must adhere to the Principles of HIV Prevention Community Planning, as specified in Section D.*

The HIV Prevention Community Planning process should result in a Comprehensive HIV Prevention Plan, jointly developed by the grantee and the HIV Prevention Community Planning group(s), which includes specific, high-priority HIV prevention strategies and interventions targeted to defined populations to be supported with HIV prevention cooperative agreement funds. Thus, each grantee's application for FY 1995 funds (and beyond) should address the plan's high priority elements in its application for funds under program announcement #300. In those jurisdictions where CDC has direct cooperative agreements with both state and local health departments, grantees are expected to coordinate planning with one another prior to finalizing their own HIV prevention applications.

Each grantee, in its FY 1995 application and beyond, must include a letter of concurrence or nonconcurrence from each HIV Prevention Community Planning group convened within the grantee's jurisdiction. Letters of concurrence would indicate the extent to which the grantee and the HIV Prevention Community Planning group(s) have successfully collaborated in developing a comprehensive HIV prevention community plan and agree upon the program priorities contained in the application. An HIV Community Planning group that disagrees with the program priorities identified in the grantee's application should cite specific reasons for nonconcurrence. In those instances where a grantee does not concur with the findings or recommendations of the HIV Prevention Community Planning group(s) and believes the public health would be better served by funding HIV prevention activities/services that are substantially different, it must submit a letter of justification in its application. CDC will evaluate and assess these justifications on a case-by-case basis to make final determinations for award of funds.

Grantees are responsible for operationalizing and implementing HIV prevention services/activities outlined in the comprehensive plan, including selecting the specific organizations/entities that should provide HIV prevention services/activities, and awarding and administering HIV prevention funds.

Some grantees may be unable to complete all aspects of the HIV Prevention Community Planning process in FY 1994. At a minimum, all grantees will be expected to (a) identify and convene an HIV Prevention Community Planning group(s); (b) determine the present and future extent, distribution, and impact of HIV/AIDS in defined populations within the grantee's jurisdiction; (c) conduct an HIV prevention needs assessment; and (d) begin the prioritization process. If the grantee and the community planning group(s) are unable to finalize the comprehensive HIV prevention plan before the grantee is required to complete and submit the application for FY 1995 funding, the grantee, with the written concurrence of the community planning group(s) in that jurisdiction, may request an extension of time to complete the planning process. CDC will evaluate and assess these requests on a case-by-case basis to make a final determination.

If CDC determines that additional time is necessary to complete the planning process, the extension will be granted contingent on the understanding that the grantee will still be required to submit an initial FY 1995 application to the HIV Prevention Community Planning group(s) in that jurisdiction for review and written comment on the program priorities identified in the grantee's application. This review and comment should be based on the objective information

obtained from the HIV prevention needs assessment and the analysis of the extent, distribution, and impact of HIV/AIDS in defined populations within the grantee's jurisdiction. Upon completion of the comprehensive HIV prevention plan, the grantee will submit a revised FY 1995 application to CDC.

F. RESTRICTIONS

Funds for the HIV Prevention Community Planning process will be awarded through the HIV Prevention Cooperative Agreements with state, territorial, and local health departments on or about January 15, 1994. However, planning funds will be restricted in the following manner: (a) up to one-half of the planning funds will be released upon receipt of a written assurance that the grantee will comply with the Principles (Section D) and Logistics (Section E) delineated in this guidance, and (b) the remaining funds will be released upon approval of the application described in Section G.

Upon receipt of the planning application, CDC will review each grantee's planning application for compliance with the principles and logistics outlined in this guidance. When approved, restrictions on the expenditure of remaining planning funds will be removed.

G. PLANNING APPLICATION CONTENT

Applications for awards of planning funds under CDC program announcement #300 must include (a) a detailed and itemized description of the proposed structure and timetable for the HIV Prevention Community Planning process throughout that jurisdiction (e.g., number, location, jurisdiction, and size of the planning group(s); proposed merger with existing planning bodies, designated health department co-chairs, and (b) criteria and procedures for nominating, recruiting, and selecting members of the HIV Prevention Community Planning group(s), including a description of specific collaboration with governmental and nongovernmental organizations and affected communities on this issue.

Recipients are encouraged to submit a plan as soon as possible, but are required to submit one no later than February 28, 1994.

H. ROLES AND RESPONSIBILITIES GRANTEES

The role of grantees in the HIV Prevention Community Planning process is to:

1. Administer and coordinate public funds from a variety of sources, including Federal, state, and local agencies, to prevent HIV transmission and reduce associated morbidity and mortality.

2. Administer HIV prevention funds awarded under the cooperative agreement, ensuring that funds are awarded to contractors in a timely manner, monitoring contractor activities and documenting contractor compliance.
3. Provide HIV/AIDS surveillance and other relevant data, and analyses of statewide, regional, and/or local data to assist the HIV community planning process in establishing program priorities based on the current and future extent, distribution, and impact of the HIV/AIDS epidemic.
4. Collaborate with state, local, and community partners to determine the most effective means for implementing HIV Prevention Community Planning in their jurisdiction (see Section D).
5. Ensure that specific policies are in place articulating the roles and responsibilities of the various components of the HIV Prevention Community Planning process.
6. Establish policies that address planning group composition, selection, appointment, and terms of office, in consultation with health authorities and community leaders in that jurisdiction.
7. Ensure that all planning group(s) reflect the population characteristics of the current epidemic in state and local jurisdictions in terms of age, race/ethnicity, gender, sexual orientation, geographic distribution, and HIV exposure category.
8. Provide expertise and technical assistance, including ongoing training on HIV prevention planning and the interpretation of epidemiologic and evaluation data, to ensure that the planning process is comprehensive and scientifically valid.
9. Promote linkages among the local community HIV prevention services providers, public health agencies, and behavioral and social scientists who are either in the local area or who are familiar with local prevention needs, issues, and at-risk populations.
10. Develop an application for HIV prevention cooperative agreement funds based on the comprehensive HIV prevention plan(s) developed through the HIV Prevention Community Planning process.
11. Ensure that technical assistance is provided to meet the needs of grantees and community-based providers in the areas of program planning, intervention, and evaluation as identified in the HIV prevention plan. Grantees should meet these needs by drawing on expertise from a variety of sources (e.g., health departments, academia, professional and other national organizations, and nongovernmental organizations).
12. Allocate resources based on the Comprehensive HIV Prevention Plan.
13. Ensure program effectiveness through specific evaluation activities, including conducting or contracting for outcome evaluation studies, providing technical

assistance in evaluation, or ensuring the provision of evaluation technical assistance to funding recipients.

HIV PREVENTION COMMUNITY PLANNING GROUPS

The role of the planning group(s) in the HIV Prevention Community Planning process is to:

1. Delineate technical assistance/capacity development needs for effective community participation in the planning process.
2. Review available epidemiologic, evaluation, behavioral and social science, cost-effectiveness, and needs assessment data and other information required to prioritize HIV prevention needs, and collaborate with the health department on how best to obtain additional data and information.
3. Assess existing community resources to determine the community's capability to respond to the HIV epidemic.
4. Identify unmet HIV prevention needs within defined populations.
5. Prioritize HIV prevention needs by target populations and propose high priority strategies and interventions.
6. Identify the technical assistance needs of community-based providers in the areas of program planning, intervention, and evaluation.
7. Consider how CTRPN; early intervention, primary care, and other HIV-related services; STD, TB, and substance abuse prevention and treatment; mental health services; and other public health needs are addressed within the Comprehensive HIV Prevention Plan.
8. Evaluate the HIV Prevention Community Planning process and assess the responsiveness and effectiveness of the grantee's application in addressing the priorities identified in the comprehensive HIV prevention plan.

SHARED RESPONSIBILITY BETWEEN GRANTEES AND HIV PREVENTION COMMUNITY PLANNING GROUP(S)

1. Select co-chairs for HIV Prevention Community Planning Group(s): Grantees select a health department employee, or a designated representative as one co-chair, and the community planning group selects the other.

2. Develop procedures that address (a) policies and provisions for reaching decisions and policies on attendance at meetings; (b) resolution of disputes identified in planning deliberations; and (c) resolution of conflict(s) of interest for members of the planning group(s).
3. Determine the distribution of planning funds to (a) support planning group meetings, and the participation of group members, public meetings, and other means for obtaining community input; (b) support capacity development for parity, inclusion, and representation of community representatives, and for other members of the planning groups to participate effectively in the process; (c). provide technical assistance by outside experts to health departments and community planning groups; (d) support community health planning infrastructure for the HIV community planning process; and (e) collect and/or analyze and disseminate relevant data.
4. Assess the present and future extent, distribution, and impact of HIV/AIDS in defined populations in the jurisdiction in which the planning is taking place.
5. Conduct a needs assessment process to identify unmet HIV prevention needs within defined populations.
6. Identify specific high priority strategies and interventions for defined target populations.
7. Develop goals and measurable objectives for HIV prevention strategies and interventions in defined target populations.
8. Integrate multiple HIV community prevention plans into a project-wide Comprehensive HIV Prevention Plan and foster integration of the HIV Prevention Community Planning process with other relevant planning efforts.
9. Develop and periodically update a comprehensive HIV prevention plan including the provision of technical assistance to meet the needs of grantees and community-based providers in the areas of program planning, implementation, and evaluation.

CENTERS FOR DISEASE CONTROL AND PREVENTION

The role of CDC in the HIV Prevention Community Planning process is to:

1. Collaborate with health departments, national organizations, federal agencies, and academic institutions to ensure the provision of technical/program assistance and training for the HIV Prevention Community Planning process. Technical/program assistance will help recipients to understand how to (a) ensure parity, inclusion, and representation of all members throughout the community planning process; (b) analyze epidemiologic, behavioral, and other relevant data to assess the impact and extent of the HIV/AIDS epidemic in defined populations; (c) conduct needs

assessments and prioritize unmet HIV prevention needs; (d) identify and evaluate effective and cost-effective HIV prevention activities for these priority populations; (e) provide access to needed behavioral and social science expertise; and (f) identify and manage dispute and conflict of interest issues.

2. Require that application content submitted by HIV Prevention Cooperative Agreement recipients for HIV Prevention Community Planning funds is in accordance with the principles in this guidance.
3. Monitor the HIV Prevention Community Planning process.
4. Require as a condition for award of cooperative agreement funds that recipients' FY 1995 applications are in accordance with the comprehensive plan developed as a result of the HIV Prevention Community Planning process or include an acceptable letter of justification as delineated in Section D.
5. Identify the minimal program components of a comprehensive HIV prevention program.
6. Collaborate with grantees in evaluating HIV prevention programs.
7. Collaborate with other federal agencies (particularly the National Institutes of Health, the Substance Abuse and Mental Health Services Administration, and the Health Resources and Services Administration) in promoting the transfer of new information and emerging prevention technologies or approaches (i.e., epidemiologic, biomedical, operational, behavioral, or evaluative) to health departments and other prevention partners, including nongovernmental organizations.
8. Compile annually a report on the projected expenditures of HIV prevention cooperative agreement funds by specific strategies and interventions. Collaborate with other prevention partners in improving and integrating fiscal tracking systems.

In addition to supplemental funds awarded for HIV Prevention Community Planning in FY 1994, state and local health departments will receive an increase in new funds awarded for HIV prevention over those awarded in FY 1993. Grantees are encouraged to delay the long-term commitment of part or all of these additional HIV prevention funds to implement unmet program needs, as identified by HIV Prevention Community Planning group(s), during FY 1994.

APPLICATION SUBMISSION AND DEADLINE

The original and two copies of the application (PHS Form 5161-1) must be submitted to Elizabeth M. Taylor, Grants Management Officer, Procurement and Grants Office, Centers for Disease Control and Prevention, 255 East Paces Ferry Road, N.E., Mailstop E16, Atlanta, GA 30305 on or before February 28, 1994.

WHERE TO OBTAIN ADDITIONAL INFORMATION

Business management technical assistance including information on application procedures and copies of application forms may be obtained from Marsha Driggans, Grants Management Specialist, Grants Management Branch, Procurement and Grants Office, Centers for Disease Control and Prevention, 255 East Paces Ferry Road, N.E., Mailstop E16, Atlanta, GA 30305, (404) 842-6523.

HIV Prevention, Community Planning Supplement must be referenced in all requests for information pertaining to this project.

Programmatic technical assistance may be obtained from your CDC project officer Division of Sexually Transmitted Diseases/HIV Prevention, Center for Prevention Services, Centers for Disease Control and Prevention, Mailstop E44, Atlanta, GA 30333, (404) 639-8315.

**SAN FRANCISCO DEPARTMENT OF PUBLIC HEALTH
AIDS OFFICE**

HIV PREVENTION PLANNING COUNCIL

BYLAWS

ARTICLE I - NAME

- Section 1. The name of this body shall be the HIV Prevention Planning Council. (HPPC)

ARTICLE II - PURPOSE

- Section 1. To develop, update, evaluate and implement San Francisco's comprehensive HIV Prevention Plan.
- Section 2. To assess existing community resources to determine the community's capability to respond to the HIV epidemic.
- Section 3. To establish priority HIV prevention needs by target populations and propose high priority strategies and interventions.
- Section 4. To identify the technical assistance and capacity development needs of HIV prevention providers in the areas of program planning, intervention and evaluation for effective participation in the planning process.
- Section 5. To consider how Counseling/Testing/Referral/Partner Notification (CTRPN); early intervention, primary care, and other HIV-related services; Sexually Transmitted Disease, Tuberculosis, and substance abuse prevention and treatment; mental health services; and other public health needs are addressed within the Comprehensive HIV Prevention Plan for San Francisco.
- Section 6. To evaluate the HIV Prevention Community Planning process and the responsiveness and effectiveness of administrative mechanisms for addressing HIV prevention priorities and allocating funds for their implementation.
- Section 7. To monitor the implementation of the priority goals, objectives, strategies, and interventions contained in the comprehensive HIV Prevention Plan by HIV prevention providers, both Department of Public Health and AIDS Office contractors.

ARTICLE III - MEMBERSHIP

- Section 1. The membership of the HPPC shall consist of no more than thirty-seven (37) members representing
- (a) the SFDPH AIDS Office
 - (b) the SFDPH Community Health Services Division
 - (c) the SF Unified School District
 - (d) the SF Division of Mental Health, Substance Abuse and Forensics
 - (e) the State Office of AIDS
 - (f) experts in epidemiology, behavioral and social sciences, evaluation, research, and health planning
 - (g) representatives of non-governmental/community organizations providing HIV prevention and related services and the affected communities.
 - (h) individuals infected with HIV.
 - (i) individuals affected by HIV.

ARTICLE IV - NOMINATIONS

- Section 1. **Governmental Representatives:** Representatives (no more than ten) of governmental organizations shall be nominated by their departments in response to a solicitation for membership issued by the Director of the AIDS Office to department heads. The Director of the California Department of Health Services Office of AIDS shall designate a representative. The Chief of the Health Services and Prevention Branch of the AIDS Office shall serve as a non-voting ex-officio member of the HPPC.
- Section 2. **Technical Experts:** Representatives (no more than 7) of experts in epidemiology, planning and the other categories listed in "f" (above) shall be solicited for membership by the Chief of the Prevention Planning, Policy and Health Education Unit of the AIDS Office on the basis of their expertise and community experience.
- Section 3. **Non-Governmental Representatives:** Nominations for up to ten (10) representatives of non-governmental organizations providing HIV prevention and related services shall be solicited through a written appeal to **all** known prevention providers (whether or not they operate under contract with the AIDS Office).
- Section 4. **Community Representatives:** Individual nominations for up to ten positions will be solicited from infected and affected communities and defined populations (particularly youth, transgendered persons, people of color, and women) at risk for HIV infection.

ARTICLE V - APPOINTMENT

- Section 1. Appointment of members to the HPPC shall be made jointly by the Director of the AIDS Office and the Director of the Department of Public Health in consultation with the Chief of the Health Services and Prevention Branch and the Chief of the HIV Prevention Planning, Policy, and Health Education Unit of the AIDS Office, based on the recommendations of a Membership Selection Committee composed of at least one of the chairs (or his/her designee) of the People of Color Advisory Committee, the chair of the HPPC Membership Committee and at least two of the Co-Chairs of the HIV Prevention Planning Council and the Co-Chairs of the Mayor's HIV Health Services Planning Council.
- Section 2. The term of office on the HPPC shall be twenty-four (24) months in addition to a two-month provisional period. At the end of their term, members may apply for appointment to a second twenty-four-month term
- Section 3. Termination/Resignation: Members who are absent (excused or unexcused) from two Council meetings within a two-month period shall be immediately advised that they are subject to termination at the discretion of the Co-Chairs. In the event positions become vacant prior to May 15 of each year due to the termination or resignation of members new Council members shall be selected for a full twenty-four-month period commencing on August 1. Appointments shall be made jointly by the Directors of the AIDS Office and the Department of Public Health in consultation with the Chief of the Health Services and Prevention Branch and the Chief of the HIV Prevention Planning, Policy, and Health Education Unit of the AIDS Office based on the recommendations of a Membership Selection Committee composed of the chairs (or his/her designee) of the People of Color Advisory Committee, the chair of the HPPC Membership Committee and the Co-Chairs of the HIV Prevention Planning Council and the Co-Chairs of the Mayor's HIV Health Services Planning Council.
- Section 4. Exemption: In consideration of the need for representation of persons with HIV, those individuals shall be exempt from the above termination clause for absences due to illness. This exemption shall also extend to other HPPC members who have a life-threatening illness.

ARTICLE VI - OPERATING PROCEDURES

- Section 1. Co-Chairs: Three (3) Co-Chairs shall be appointed to facilitate the operations of the HPPC: one (1) who shall be a staff member of the HIV Prevention Planning, Policy and Health Education Unit of the AIDS Office appointed by the Director of the AIDS Office; and two (2) (excluding AIDS Office staff) community members selected by the HPPC membership. The community Co-Chairs shall be elected for a term of two calendar years on a staggered term basis. In the event a Co-Chair resigns from office prior to the end of the two year period, the membership shall elect another Co-Chair who will serve the remainder of the unexpired term. Responsibility for presiding at HPPC meetings shall be rotated among the Co-Chairs. A community Co-Chair who has reached the end of his/her two-year term, shall continue to serve the HPPC as an interim Co-Chair with full voting privileges for a period of six months. The retiring Co-Chair shall not be counted in the full HPPC membership count during this period. A new Co-Chair shall be elected by the membership from among newly appointed members before the end of April of each year and shall be mentored by the outgoing Co-Chair until the end of June.
- Section 2. Parliamentary Procedure: The rules of parliamentary practice, as set forth in Robert's Rules of Order, shall govern all meetings of the HPPC except as otherwise provided herein. Where the Bylaws are silent on a procedural issue, Robert's Rules of Order shall serve as the formal guidance.

ARTICLE VII - MEETINGS

- Section 1. Frequency of Meetings: Meetings of the HPPC shall be held on the second Thursday of each month. Any change in meeting schedule shall be announced at least seventy-two (72) hours in advance.
- Section 2. Open Meetings: All meetings (except Executive Sessions) of the HPPC and its committees or task forces shall be open to any interested person.
- Section 3. Special Meetings: Special meetings may be called and scheduled by the Co-Chairs or by six or more Council members. The agenda, place, and time of such meetings shall be set forth in the meeting notice at least twenty-four (24) hours before the time of such meeting.
- Section 4. Committees/Task Forces: The HPPC may create special committees and task forces to assist in the conduct of Council business. Such committees and task forces shall conduct open meetings which shall be announced at least seventy-two (72) hours in advance of such meeting(s).

- Section 5. Quorum: A quorum of the HPPC must be present at any regular or specially scheduled meeting in order for the Council to engage in formal decision-making. A quorum is defined as more than one-half of the current membership provided that there are no less than eight (8) representatives of non-governmental organizations and/or affected communities present. All three (3) Co-Chairs shall be counted for purposes of a quorum.
- Section 6. Proceedings: Council meetings will be tape recorded, with recordings available to Council members for their review. Meeting recordings will be held for a minimum of three (3) months. Written minutes will be made available prior to the following meeting and will be a public document.
- Section 7. Voting: While the Council will strive for consensus, every official act taken by the Council shall be adopted by a majority vote. A majority vote shall be one half (1/2) plus one (1) of all Council members present or voting provided a quorum is present. An absent Council member may specify in writing (including by FAX) his/her opinion on an identified agenda item. This information will be shared with the Council by Council staff but will not be considered a vote. The presiding Co-Chair may vote only when breaking a tie vote. The remaining Co-Chairs shall retain their voting privileges unless required to assume the chair. Council staff does not have a vote.

ARTICLE VIII - CONFLICT OF INTEREST

- Section 1. It shall be assumed that there is no conflict of interest in members as they work to develop and implement an HIV prevention plan. In deliberations regarding recommendations for the criteria to be used in the allocation of grant monies and/or evaluation of specific programs and activities, should a conflict of interest arise, members with a potential or actual conflict shall declare the nature of their conflict and refrain from voting on that item.

ARTICLE IX - CONFLICT RESOLUTION

- Section 1. In the event of disagreements and/or differences which cannot be resolved through discussions between the HPPC, its Co-Chairs and the staff of the HIV Prevention Planning, Policy and Health Education Unit of the AIDS Office in the prioritization and implementation of programs and services, the Director of the AIDS Office will serve as the first level arbitrator. Should it be impossible to resolve the issue(s) at this level, the matter(s) will be referred to the Director of the Department of Public Health who will attempt to arbitrate the matter and ultimately make a binding decision.

- Section 2. In the event of continued disagreement with the final decision, an appeal may be filed directly with the Centers for Disease Control where an attempt will be made to mediate and manage the dispute and bring it to closure.

ARTICLE X - AMENDMENTS

- Section 1. These Bylaws may be amended by the Council at any Regular Meeting by a two-thirds (2/3) vote of the members provided notice of proposed amendments has been published and distributed to the members no less than five (5) working days prior to the meeting.
- Section 2. Members may propose amendments to the Bylaws at any Regular Meeting. Action on such proposed amendments will take place at the next regularly scheduled meeting.

Revised
11/14/96

Attachment 3

Meeting Participation Guidelines

Beliefs:

We are committed to working openly in a group to make decisions about public policy.

We believe that broad public involvement in decision making that acknowledges a diversity, and a mutuality, of interests is preferable to the involvement of a few people in decision making that reflects only special interests or individual perspectives. Broad public involvement in decision making carries with it the responsibility for high-quality decision making.

We believe that the implementation of public policies is a continuing process that proceeds in stages, and that implementation should be approached from the standpoint of “continuous improvement.” Thus, we can “correct a course” during any stage of implementation, if there is general agreement that decisions made earlier need to be changed to better meet the intent of the CDC guidance or to better serve affected populations.

We believe in the principles of equity and fair play.

On the basis of those beliefs, we agree to the following guidelines for our participation:

- We will balance **process** (the need for participation and inclusion, and focus on the quality of experience for HPPC members) and **efficiency** (the need to deliver quality output in time to meet deadlines).
- We will be responsible, as HPPC members, for decision making regarding the goals and objectives for the meetings. As members, we agree to:
 - actively participate in small and large group discussions;
 - engage one another in a respectful and professional manner;
 - thoroughly prepare for each meeting by carefully reading all previously distributed material;
 - consider all proposals carefully, and with consideration for the needs and concerns of affected populations; and
 - be accountable for the actions of the HPPC by reporting back to our constituents on a regular basis.
- All HIV prevention advisory groups (e.g., the People of Color Advisory Committee), the Health Services Planning Council, and the State Office of AIDS will be included in the information/feedback loop regarding the deliberations and actions of the HPPC.

- Advisors and technical consultants are invited to share their expertise primarily in small groups, by participating in discussions to assist HPPC members toward developing recommendations for further consideration by the group as a whole. Advisors agree to:
 - minimize their participation in large group discussions, thus encouraging full participation by voting HPPC members;
 - respond to questions regarding technical aspects of implementation;
 - share their experience and expertise as needed.
- Staff from the AIDS Office and its consulting organizations will provide technical and logistical support for all HPPC (Council and committee) meetings and may participate fully in committee discussions. At HPPC meetings, when recognized by the chair, each may contribute to the discussion and deliberation.
- Members of the community are invited to become full voting members of one of the HPPC's committees and to provide the HPPC with input, expertise, and information during the public comment period set aside on the HPPC's adopted agenda. Community members are invited to observe the proceedings during other parts of the regular council meetings.
- We are sincerely committed to adopting all group decisions by *consensus*. Consensus decision making requires that each group member be willing to listen to and to incorporate into decisions the heartfelt needs of all constituencies affected by those decisions. Consensus also means that each member is willing to modify his/her individual objectives for the sake of what will benefit HIV-affected populations in San Francisco.
- When it is decided that consensus cannot be reached on a particular issue in the time allotted, that decision will be made by majority vote. If that issue cannot be decided by the HPPC, the responsibility making a decision will revert to the AIDS Office.
- *To promote a positive environment for open discussion by all participants, and to maximize efficiency, we agree to observe the following ground rules:*
 - We will start and end the meetings on time.
 - We will schedule one break per meeting.
 - We will provide snacks and beverages.
 - We will show respect for one another as people by avoiding personal attacks and the use of labels, listening with understanding, and restricting process observations to behavior only (and not assume we know another's motives).
 - We will focus on agenda topics and timelines provided, or formally renegotiate these as a group.
 - We will avoid using acronyms as much as possible.
 - If an individual or small group accepts an assignment, they will complete it, on time, or signal as early as possible that they cannot do so.
 - It is OK to respectfully call "process" or "point of order" at any time.
 - The conversation will not be dominated by a small number of people.

- Side conversations during a meeting are *not* OK and are discouraged.
- We will not “echo” other’s comments and will focus on presenting new or alternative information.
- When we are “bogged-down” in a discussion, the presiding Co-Chair will determine whether or not the discussion should proceed. If additional time is required to come to closure, the Co-Chair will “buy” time from the group as a whole.
- It is OK to have fun.

Attachment 4

Responsibilities of Committee Members

Committee Member Core Roles*

- Attend all meetings
- Contribute to discussion
- Actively participate
- Review materials/minutes between meetings
- Question processing for clarity
- Gain understanding
- Support committee's action to HPPC and the community
- Bring information to the table
- Strive for consensus, vote when necessary

*This applies to community members who officially join and actively participate, as well as AIDS Office staff.

Committee Chair Core Roles

- Agenda setting
- Review and approve minutes
- Attend all committee and Council meetings
- Facilitate committee meetings
- Make presentations on behalf of committee at council meetings
- Ensure member participation at committee meetings
- Trouble-shoot issues
- Help problem solve
- Attend steering committee
- Work with HPPC Co-Chairs and Technical Support Team
- Bring information to the table
- Strive for consensus, vote when necessary

Note: These are the core elements. As committees define themselves, there may be additional roles and responsibilities to include.

Attachment 5

Procedures for Public Comment at HPPC Meetings

The purpose of these procedures are to facilitate public comment. The HIV Prevention Planning Council strives for an open and participatory process. A part of that process includes time reserved at each meeting for public comment. To ensure a fair process and to enable the HPPC to hear from as many persons as possible who have public comment, these procedures have been established.

- Each speaker must complete a Public Comment Registration Form (available at the front table) and give to a Council Co-Chair. Please include on the form brief mention of the topic you will speak about.
- Each speaker will have a maximum of two (2) minutes to speak and will be notified when 30 seconds remain.
- When the time is up, the next speaker will be called by the meeting Co-Chair.
- If you have written comments, please leave a copy with the Co-Chairs, so they may be added to the minutes of this meeting.
- Time permitting, members of the HPPC may wish to ask questions after all public comment has been received.

Thank you for your participation.

CHAPTER 2 - GOALS AND OBJECTIVES

I. INTRODUCTION

This chapter presents goals and objectives for HIV prevention planning in San Francisco. These goals and objectives represent the foundation of the HIV Prevention Planning Council's (HPPC) commitment to reducing and eliminating San Francisco's incidence of HIV. The HPPC strongly believes that prevention will be most successful for the community as a whole if the various prevention efforts work in concert with each other. Working together and standardizing essential aspects of prevention will allow planning and evaluation to take place at the city-wide level. The goals and objectives in this chapter provide the framework that guides the work of the HPPC, the AIDS Office and prevention providers. The objectives outline the specific steps to be taken that will ensure a standardized system of data collection, strengthened linkages among providers, and prevention strategies and interventions that are tailored to the needs of populations at highest risk for contracting HIV as we work towards our goals of eliminating new HIV infections and developing services to meet the needs of those at risk for HIV.

This chapter begins by presenting prior years' goals and objectives and outlines progress made on them. Many themes and actual activities continue from planning year to planning year. The goals and objectives that were developed in the first year of community planning (1994) to guide efforts in 1995 are listed first, followed by the goals and objectives developed early in 1996 to guide that year's efforts. After summarizing common themes and progress of past years' goals and objectives, the chapter continues with the goals and objectives for the future. These were developed at the end of 1996 to steer HIV prevention in 1997 and beyond.

II. PAST YEARS' GOALS AND OBJECTIVES

Goals and Objectives - 1995

The 1995 goals and objectives as they appeared the 1995 Prevention Plan are presented below, followed by a summary of the progress towards meeting these objectives.

Goal 1: Reduce new HIV infections in the City and County of San Francisco to as close to zero as possible by the year 2000. To do this, we will target both HIV(+) and HIV (-) communities.

Objectives

1. All providers will measure clients' risk behaviors and involvement in other interventions in a standardized manner.

- a) When possible providers will follow-up with intervention participants and measure the same behaviors 6 months later, in order to document a minimum of 15% reduction in risk behaviors.
 - b) In those instances where tracking and follow-up are not possible, providers will measure the behavior change of a similar population.
2. Prevention strategies and interventions selected for implementation shall be consistent with goals and objectives and with the Priority-Setting criteria established by this plan.
3. The AIDS Office will ensure that primary HIV prevention activities are linked with secondary HIV prevention activities:
 - through similar, consistent messages throughout the continuum of HIV services;
 - through regular joint meetings for primary and secondary providers; and
 - as appropriate, provide primary messages at places where people are seeking secondary treatment.

Goal 2: The AIDS Office will standardize units of service definitions for HIV prevention services by the end of 1995, so that the work of different providers can be looked at in the context of the overall prevention effort in the city.

Objectives

1. An ad-hoc committee of providers, DPH staff, and researchers will be convened by the AIDS Office to assist in the development of the standardized units of service.
2. Once standardized units of service have been adopted, new and existing providers will be given 3 months and 6 months, respectively, to incorporate these standards into their contracts and information collection systems.

Goal 3: Make evaluation possible: establish a standard evaluation system for prevention efforts.

Objectives

1. The AIDS Office will develop a plan to standardize collection of service data by all prevention providers.
2. The AIDS Office will organize this data, and make it available to all prevention efforts in San Francisco, by the end of 1995.

Goal 4: All HIV prevention providers in San Francisco will have the technical and administrative capabilities to provide competent and appropriate prevention programs.

Objectives

1. The AIDS Office will assess the technical and administrative capabilities of all HIV prevention providers in San Francisco.

2. The AIDS Office will coordinate the delivery of sufficient technical assistance to providers in a number of areas including: incorporating the new standardized units of service into proposals, evaluation and reporting efforts, staff training, computer system development.

Goal 5: Prevention efforts shall be culturally appropriate.

Objectives

1. The HPPC and the AIDS Office shall develop a definition of cultural competence and cross-cultural competence that addresses staffing, training, governance, service provision, evaluation process, and client satisfaction, and that recognizes the diversity of the population of San Francisco, not limited to language, ethnicity, race, national origin, sexual orientation, etc.
2. Prevention providers and the AIDS Office shall demonstrate that programs and agencies are culturally competent consistent with the definition developed in Objective 1.

Progress Towards Achieving 1995 Goals and Objectives

The 1995 goals and objectives represent the broad framework that was established in the start-up year of community planning. Several themes emerge from a review of these goals and objectives -- themes that will continue in subsequent years:

- developing a city-wide evaluation plan;
- developing a client-level risk assessment;
- ensuring that providers receive the technical assistance necessary to their programs;
- standardizing units of service;
- developing definitions of cultural competence and ensuring that programs meet the definition; and
- requiring that providers use the Plan as guidance for program development and modifications.

Goal 1, Objective 1, called for providers to measure risk behaviors of prevention clients in a standardized manner. Work on this objective began in 1995 with the establishment of the Evaluation Task Force, and became a task of the Evaluation/Technical Assistance Committee that continues into 1997. Ensuring that Objective 2 was met became a task of the Goals and Objectives Committee in 1996. Objective 3, regarding the linkage of primary HIV prevention to secondary prevention had not yet been accomplished by the end of 1995, and its components were addressed by the Linkages Committee in 1996.

Goal 2 called for the standardization of units of services definitions so that individual providers' work can be viewed in the context of a city-wide effort. The formation and work of the Evaluation Task Force in 1995 began the work of advising the AIDS Office on the development of standardized units of service. The AIDS Office completed the units of service

definitions by July of 1996 and these definitions were used to describe units of service in the 1996 Request for Proposals (RFP).

The third goal for 1995 clearly stated the notion of “making evaluation possible” within HIV prevention. The formation of the Evaluation Task Force in 1995 and the development of the standardized units of service began the process of collecting standardized service data from providers, as stated in Goal 3, Objective 1. Further work on standardizing service data collection and making it available for use in prevention efforts (Objective 2) became a continued activity for 1996. In addition, providers funded through the 1996 RFP are required to use these units of service.

In 1995, the Department of Public Health received supplemental funding to accomplish Goal 4, which calls for HIV prevention providers to have “technical and administrative capabilities” to carry out HIV prevention. The actual assessment of technical and administrative capacities of providers (Objective 1) was delayed slightly during 1995, but by the end of the year, the AIDS Office entered into a contract with a collaboration of five social research and consulting firms (dubbed the “OD/TA (Organizational Development and Technical Assistance) team”) to conduct this needs assessment. The assessment process and the delivery of technical assistance became a task for 1996, guided by the Evaluation/Technical Assistance Committee of the HPPC. The needs assessment was, in fact, completed by the end of 1996.

The 1995 goals were ambitious and forward-thinking. While they were not fully achieved in the first year, they set a direction for the Council’s work that continues. The call for client risk assessment, city-wide evaluation of prevention’s effectiveness, and standard definitions of service set into motion activities that will fundamentally change how prevention is funded and conducted.

HPPC Goals and Objectives - 1996

The 1996 goals and objectives were developed by the Goals and Objectives Committee and adopted by the Council in early 1996. They reflect a continuation of work done during the previous planning years and outline proposed activities for the Council, the AIDS Office and the community. The process for developing recommended goals and objectives for 1996 for the HPPC started with a review of the 1995 goals and objectives. Committee members assessed the progress made on these objectives and formulated goals and objectives that addressed newly identified needs or continuing work on prior activities. Additional input was gathered from AIDS Office staff and members of other HPPC committees to ensure that the goals and objectives reflected tasks currently underway or upcoming by the various committees.

As the Council gained experience in prevention planning, the sophistication of the goals and objectives increased. Two overarching goals for prevention were selected, and objectives were classified into three types, process, impact and outcome. Outcome objectives propose change on the broadest level—the community level—and reflect results expected in the longer term. The 1996 outcome objectives call for a city-wide reduction in HIV incidence, behavior change among participants in HIV prevention, improved referral methods, and compliance with Plan guidelines by the year 2003.

Impact objectives propose a change in target populations, i.e. prevention providers or behavioral risk populations. These objectives are of shorter term than the outcome objectives, although still of several years duration. The impact objectives call for incremental changes in infection rates, risk behaviors, and referral methods, as well as program changes and compliance with the Plan guidelines between 1997 and 1999.

The third type, process objectives delineate the activities needed to bring about the expected changes proposed in the impact and outcome objectives. The 1996 process objectives outline the work of the HPPC and its committees during 1996. Each objective describes a specific task or activity that will be undertaken by a committee, the HPPC Co-Chairs, and/or the AIDS Office.

Goal 1: To eliminate HIV incidence (new infections) in San Francisco.

Goal 2: To ensure that HIV prevention in San Francisco best meets the needs of people at highest risk.

Outcome Objectives

1. By the year 2003, reduce new HIV infections from the estimated 1992⁷ rate of 150/100,000 per year to 50/100,000 per year.
2. By the year 2003, 75% of individuals who engage in high risk behaviors who are served by prevention providers will reduce those behaviors by 75% of the 1997 rate.
3. By the year 2003, 100% of individuals who have tested through CTRPN services will, based on assessment and/or request, be successfully referred to an appropriate provider.
4. By the year 2003, 100% of HIV prevention providers in San Francisco will be performing HIV prevention activities for persons at high risk for HIV as defined by the HPPC and according to the HIV Prevention Plan.

Impact Objectives

1. By 12/31/97, 100% of AIDS Office funded prevention providers will make changes in their programs based on technical assistance provided by the Organizational Development/Technical Assistance (OD/TA) Team.
2. By 7/1/98, 100% of AIDS Office providers will be performing HIV prevention activities for persons at high risk for HIV as defined by the HPPC and according to the HIV Prevention Plan.

⁷ Department of Public Health AIDS Office, Consensus Report, 1992.

3. By 9/1/99, 100% of proposals received for funding year 2000 will address all the changes in the 1999 RFP.
4. By 12/31/99, the rate of new HIV infections will be reduced by 25% from the 1995 estimated rate among all 12 behavioral transmission groups.
5. By 12/31/99, 100% of individuals participating in high risk behaviors will reduce those behaviors 35% of the 1997 rate, as measured by the use of standardized evaluation data.
6. By 12/31/99, the number of CTRPN tested HIV negative and positive individuals who are successfully referred by AIDS Office CTRPN providers will increase from 1996 rate by 25%.

Process Objectives

With the approval of the HIV Prevention Planning Council,

1. By 5/31/96, the Goals, Objectives, and Future Directions Committee will develop goals and objectives for the 1996 Requests for Proposals.
2. By 5/31/96, the Resource Allocation and Resource Inventory Committee will make recommendations to the AIDS Office on guidelines for the distribution of HIV prevention funds in SF for 1997 and 1997-98.
3. By 6/30/96, the Resource Allocation and Resource Inventory Committee will update the inventory of HIV prevention resources available in San Francisco.
4. By 6/30/96, the Resource Allocation and Resource Inventory Committee will develop guidelines for reviewing proposals received in response to the 1996 Requests for Proposals.
5. By 6/30/96, the Evaluation/Technical Assistance Committee will provide guidance to the Strategic Evaluation Planning consultants as they develop a standardized evaluation plan.
6. By 6/30/96, the Evaluation /Technical Assistance Committee will provide guidance to the OD/TA Team, including the STD Prevention Training Center, as they coordinate the delivery of technical assistance and training to AO contractors, DPH providers, and the AO in the areas of program planning and evaluation, organizational development, computer system development, data collection and interpretation, calculation of units of service, and cultural competency.
7. By 6/30/96, the HPPC Co-Chairs will ensure that all HIV prevention providers have copies of the 1995 HIV Prevention Plan and updated Priority-Setting and Strategies and Interventions Chapters and other documents produced by the HPPC.

8. By 9/1/96, the Linkages Committee will make recommendations to ensure that primary prevention activities are linked with each other and with secondary prevention activities and other related providers.
9. By 9/1/96, the Linkages Committee will make recommendations to ensure development and delivery of consistent messages to be used throughout the continuum of HIV services, and the provision of training for all AIDS Office providers in the use of these messages.
10. By 9/1/96, the Membership Committee will develop methods for gaining additional community input on the work of the HPPC.
11. By 9/15/96, the HPPC will update the HIV Prevention Plan to reflect the work of the Council and committees during 1996.
12. By 12/31/96, the HPPC, in conjunction with the HIV Prevention Planning, Policy, and Health Education Unit of the AIDS Office will develop and implement training for HIV prevention providers on the 1995 HIV Prevention Plan and the updated Priority-Setting and Strategies and Interventions Chapters.
13. By 12/31/96, the Epidemiology/Research Committee will provide guidance to the consultants and the AIDS Office to revise the Epidemiologic Profile in the HIV Prevention Plan and will standardize behavioral and demographic characteristics to be collected by AO prevention providers.
14. By 12/31/96, the Epidemiology/Research Committee will identify and prioritize behavioral research and epidemiological studies to address gaps in knowledge about behavioral transmission groups.
15. By 12/31/96, the Membership Committee will develop methods to ensure that the membership of the Planning Council is representative of the diverse San Francisco community, promotes inclusion of viewpoints of members and of the community, and that there is parity among members.
16. By 12/31/96, the Membership Committee will review and adjust operating procedures utilized by the HPPC.
17. By 12/31/96, the Evaluation/Technical Assistance Committee will provide guidance to Strategic Evaluation Planning Team to develop standardized variables to be collected by prevention providers for use in measuring high risk behaviors; including demographics of behavioral transmission groups and units of service.
18. By 12/31/96, the Evaluation /TA Committee will provide guidance to the OD/TA Team as they perform a needs assessment of AO contractors, DPH providers, and the AO to determine their programmatic technical assistance needs.

19. By 12/31/96, the Linkages Committee will make recommendations to the AIDS Office and prevention providers to establish a system and documentation of referrals and other linkages, including collaborations among prevention providers and related providers for high risk HIV negative individuals and HIV positive individuals. Documentation will include tracking referrals, assessing appropriateness of referral and client follow-through with referral.

Progress on 1996 Goals and Objectives

In 1996, the HPPC adopted two overarching goals: the elimination of new HIV infections in San Francisco and the assurance that HIV prevention best meets the needs of people at highest risk for HIV infection. The outcome and impact objectives describe time-phased milestones for achievement of these goals. None of the outcome or impact objectives were intended to be completed in 1996. The process objectives, however, directly represent the work of the Council and its committees that was expected to be completed during 1996. While some of the process objectives were not met by the month specified in the objective, most were met by the end of the year. Progress on the 1996 process objectives is summarized below, organized by each of the committees' work.

Goals and Objectives Committee

The goals and objectives for the 1996 Request for Proposals were developed by the Goals and Objectives Committee and adopted by the Council in May 1996 (Objective 1). This Committee also developed goals and objectives for the CDC Cooperative Agreement Application and for the HPPC in 1997.

Resource Allocation and Resource Inventory Committee

The RA/RI Committee completed recommendations for the allocation of prevention funds and the review of prevention program proposals (Objectives 2 and 4) in May, and the Resource Inventory (Objective 3) was adopted by the Council in November.

Linkages Committee

The HPPC adopted recommendations developed by the Linkages Committee for strengthening referrals and linkages (Objectives 8 and 19) in November. Because other priorities took precedence in the work of this Committee, the decision was made to postpone work on Objective 9, ensuring the development of consistent messages for HIV prevention. This has become a task for 1997.

Evaluation/Technical Assistance Committee

The Evaluation/Technical Assistance Committee, with approval from the Council, provided guidance on development of the strategic evaluation plan (Objective 5), marked by the Council's adoption of the Principles Guiding the Strategic Plan for Evaluation in August, 1996.

Throughout the year, this Committee also engaged in ongoing discussion and input on the standardized variables for collecting data on high risk behaviors, demographics, and units of service (Objective 17), and the Council adopted the Behavioral Risk Assessment guidelines in June 1996. This Committee also provided guidance on the organizational development and technical assistance needs assessment (Objective 18), which was completed during this year. Completion of the needs assessment represented a first step in delivering technical assistance to providers (Objective 6), since it allowed providers to focus on their organizational needs. The findings will guide the actual provision of technical assistance, a task which will continue in 1997.

Epidemiology and Research Committee

During 1996 this Committee provided ongoing guidance during on the revision of the Epidemiologic Profile of the Prevention Plan (Objectives 13). The Committee also identified behavioral and epidemiological research priorities, and these were adopted by the Council in August 1996 (Objective 14).

Membership Committee

The Membership Committee's work was adopted by the HPPC to achieve Process Objectives 10, 15, and 16. The Membership Committee also planned and facilitated the HPPC Retreat in July 1996.

HPPC / AIDS Office

The AIDS Office and HPPC developed trainings on the 1995 Prevention Plan and supplemental 1996 chapters (Objective 12). Two trainings on the Priority-Setting chapter were held in March, 1996, two sessions on Linkages and Goals and Objectives were held in April and May, and three trainings on evaluation were conducted in June of 1996. In addition, the 1995 Plan and the Strategies and Interventions and Priority-Setting Chapters were distributed to prevention providers in San Francisco (Objective 7).

The 1997 HIV Prevention Plan was drafted and presented to the Council in December 1996 (Objective 11).

III. THE COMMITTEE AND THE DECISION-MAKING PROCESS

The Goals and Objectives and Future Directions Committee was formed in February of 1996, and consisted of five Council members, two AIDS Office staff persons and one community member. The Committee received logistical support from Polaris Research and Development and technical support from Harder+Company Community Research. Between March and December the Committee met a total of ten times.

The development of each set of goals and objectives involved the Committee members working together to express ideas, discuss expected outcomes, and share information about the

various HPPC tasks and processes. The Committee then formulated these ideas into specific, time limited, and measurable objectives to guide the work of the Council.

Decisions about the language and content of each goal and each objective were made based on group consensus. Draft versions of the goals and objectives were prepared by an AIDS Office staff person and distributed to the Committee members before or at the start of meetings for review and revisions. Working from the text, Committee members discussed vague or contentious points. This process continued until agreement was reached on the text. Part of each meeting was devoted to revising text and part was devoted to discussing new points to be added to the growing list of objectives. For each set of goals and objectives, a draft of the recommended goals and objectives was presented to the Council for approval in concept. Feedback or suggestions offered by Council members were discussed at the Committee meetings, and adjustments were made. The final recommended goals and objectives were then presented for formal adoption by the HPPC.

IV 1997 GOALS AND OBJECTIVES FOR THE FUTURE

1997 HPPC Goals and Objectives

In developing the goals and objectives for 1997, the Committee reviewed the Council's 1996 goals and objectives to determine how much had been accomplished and which activities were to be continued in 1997. The Council retained the two prevention goals developed in 1996, and retained or modified only slightly the outcome objectives. A few of the 1996 impact objectives measuring incremental changes toward one of the outcome objectives were not continued as 1997 objectives. New impact measures were added to better develop the referral system and to conduct a city-wide behavioral risk assessment. Many of the process objectives reflect continuing work and /or implementation of work begun in 1996, such as providing guidance on the delivery of technical assistance to providers, assisting with implementation of recommendations for referrals and linkages, and continuing to adjust operating procedures for the HPPC membership. New objectives were also added to reflect Council members' desire to review the priority-setting process, participate in contract monitoring, and evaluate the RFP process.

Goal 1: To eliminate HIV incidence (new infections) in San Francisco.

Goal 2: To ensure that HIV prevention in San Francisco best meets the needs of people at highest risk.

Outcome Objectives

1. By 12/31/99, reduce new HIV infections from the estimated 1992⁸ rate of 150/100,000 per year to 110/100,000 per year.

⁸ Department of Public Health AIDS Office, Consensus Report, 1992.

2. By 12/31/03, reduce new HIV infections from the 1992⁹ rate of 150/100,000 per year to 50/100,000 per year.
3. By 12/31/03, 90% of individuals reached through AIDS Office funded prevention providers will, based on assessment and/or request, be successfully referred to an appropriate provider. (Note: “successfully referred” is defined as: followed through on a referral and received services.)
4. By 12/31/03, 90% of identified HIV prevention providers in San Francisco will be performing HIV prevention activities according to the HIV Prevention Plan.

Impact Objectives

1. By 12/31/97, all AIDS Office funded prevention providers will:
 - make changes in their programs based on recommendations from technical assistance provided by the Organizational Development/Technical Assistance (OD/TA) Team.
 - perform an assessment of individual client needs and make appropriate referrals as needed and/or requested with 100% of program participants in the following interventions: venue-based individual outreach, CTRPN, one-to-one risk reduction counseling, and prevention case management.
 - perform a behavioral risk assessment using standardized variables with 100 clients or 20% of clients (whichever is lower) and analyze and report findings and implications to the HPPC through the AIDS Office.
2. By 7/1/98, all AIDS Office funded prevention providers will be performing HIV prevention activities according to the HIV Prevention Plan.
3. By 12/31/99, 100% of individuals participating in high risk behaviors will reduce those behaviors by 35% of the 1997 rate, as measured by the use of standardized evaluation data.
4. By 12/31/98, 50% of individuals reached through AIDS Office funded prevention providers will, base on assessment and/or request, be successfully referred to an appropriate provider.

Process Objectives

1. By 12/31/97, the HIV Prevention Planning Council (HPPC) will update the HIV Prevention Plan to reflect the work of the Council and Committees during 1997.

⁹ Department of Public Health AIDS Office, Consensus Report, 1992.

2. By 12/31/97, members of the HPPC will be included as part of the AIDS Office team monitoring programs funded through the 1996 Request for Proposals for the purpose of providing feedback on implementation of and compliance with the Plan.
3. By 12/31/97, the HPPC Steering Committee (composed of Committee Chairs) will monitor progress on the accomplishment of the HPPC goals and objectives and coordinate activities between Committees every two months.
4. During 1997, the HPPC will insure that research projects funded by the AIDS Office with planning funds are in line with the HIV Prevention Plan through:
 - presentations by researchers of studies during Council meetings;
 - participation of HPPC members on advisory committees of research projects.
5. With the knowledge, consent, direction, and later approval of the HIV Prevention Planning Council, a committee of the HPPC will:
 - a) By 5/31/97, update the inventory of HIV prevention resources available in San Francisco.
 - b) By 5/31/97, evaluate the RFP process from 1996 and make written recommendations to the AIDS Office for improvement.
 - c) By 5/31/97, review and adjust HPPC operating procedures. Operating procedures include:
 - meeting times, format, and structure of Council meetings, including public comment and Council member participation;
 - the roles and amount of logistical and technical support;
 - membership and member orientation policies and procedures, including length of terms, mentorship for new members and incentives for participation.
 - d) By 12/31/97 make written recommendations to the AIDS Office to insure development and delivery of consistent messages to be used throughout the continuum of HIV services, and the provision of training for all AIDS Office providers in the use of these messages.
 - e) By 7/31/97, review the 1996 HPPC priority-setting process and recommend changes accordingly to the AIDS Office and to the HPPC.
 - f) By 8/1/97, develop goals and objectives for the 1998 CDC Application.
 - g) By 8/1/97, develop goals and objectives for the 1998 HIV Prevention Planning Council.

- h) During 1997, provide guidance to the OD/TA consultants in their delivery of technical assistance and training to AO contractors, DPH providers, and the AIDS Office.
- i) During 1997, provide guidance in the implementation of all three levels of the strategic evaluation and data collection plan. The three levels of the evaluation plan are:
 - Provider level
 - Intervention Research level
 - Prevention Indicator and Surveillance level
- j) By 12/31/97, assist the AIDS Office with the implementation of the system and documentation of referrals and other linkages, including collaborations, implemented by prevention providers and related providers for high risk HIV negative individuals and HIV positive individuals.
- k) By 12/31/97, implement methods to insure that the membership of the Planning Council and its committees is representative of the diverse San Francisco communities, promotes inclusion of viewpoints of members and of the community, and that parity exists among members.
- l) By 12/31/97, review and update, as needed, the list of research priorities and make written recommendations to the AIDS Office.

Looking at the progression of goals and objectives from 1995 to 1997, it is easy to see that they build on the previous year's accomplishments. Goals and objectives from 1995 set the ground work for the following years' activities. This progression represents efforts to shift the HIV prevention community to: a standardized collection of risk behavior data; demographics, and services provided; a focus on behavioral risk and behavior change; and a plan to conduct city-wide evaluation. The plan for technical assistance will help to build prevention providers' capacity to meet these goals and objectives.

Goals and Objectives for the 1997 Application to the CDC

In its application to the CDC, the AIDS Office was required to submit a set of goals and objectives for its scope of work for HIV prevention program plans in 1997. The Committee worked with the AO to develop the concepts to be used in the application's objectives, and these were adopted by the Council. The AO included these goals and outcome objectives explicitly in its application and included the process objectives, using a slightly different format for objectives referring to the twelve behavior risk populations (shown here). To make a more competitive proposal and to meet application criteria, the AO added a few process objectives for activities of the AIDS Office, CTRPN, and Department of Public Health HIV Program (not shown).

Goal 1: To eliminate HIV incidence (new infections) in San Francisco.

Goal 2: To ensure that HIV prevention in San Francisco best meets the needs of people at highest risk.

Outcome Objectives

1. By 12/31/03, reduce new HIV infections from the estimated 1992 rate of 150/100,000 per year to 50/100,000 per year. (Rate is based on the Department of Public Health AIDS Office, Consensus Report, 1992.)
2. By 12/31/99, reduce new HIV infections from the estimated 1992 rate of 150/100,000 per year to 110/100,000 per year. (Rate is based on the Department of Public Health AIDS Office, Consensus Report, 1992.)

Process Objectives

1. By 12/31/97, 100% of AIDS Office funded prevention providers will be performing HIV prevention activities according to the HIV Prevention Plan.
2. By 12/31/97, AIDS Office funded prevention providers will have conducted and analyzed a one-time behavioral risk assessment documenting the risks for HIV for their populations and will have incorporated results into program planning.
3. By 12/31/97, 75% of AIDS Office funded prevention providers will participate in organizational development/capacity building activities.
4. By December 31, 1997, males in behavioral risk population #1 will have been reached through various interventions as described in the Strategies and Interventions Chapter of the HIV Prevention Plan.
5. By December 31, 1997, males in behavioral risk population #2 will have been contacted through venue based individual outreach, single and multiple group sessions, and other interventions according to the required standards of provision of service included in the HIV Prevention Plan for each intervention.
6. By December 31, 1997, males in behavioral risk population #3 will have been contacted through venue based individual outreach, single and multiple group sessions, and other interventions according to the required standards of provision of service included in the HIV Prevention Plan for each intervention.
7. By December 31, 1997, males in behavioral risk population #4 will have been contacted through venue based individual outreach, single and multiple group sessions, and other interventions according to the required standards of provision of service included in the HIV Prevention Plan for each intervention.

8. By December 31, 1997, females in behavioral risk population #5 will have been contacted through venue based individual outreach, single and multiple group sessions, and other interventions according to the required standards of provision of service included in the HIV Prevention Plan for each intervention.
9. By December 31, 1997, males in behavioral risk population #6 will have been contacted through venue-based individual outreach, single and multiple group sessions, and other interventions according to the required standards of provision of service included in the HIV Prevention Plan for each intervention.
10. By December 31, 1997, females in behavioral risk population #7 will have been contacted through venue based individual outreach and single and multiple group sessions according to the required standards of provision of service included in the HIV Prevention Plan for each intervention.
11. By December 31, 1997, males and females in behavioral risk populations #8 through #12 will have been contacted through venue-based individual outreach, and single and multiple group sessions according to the required standards of provision of service included in the HIV Prevention Plan for each intervention.

In concert with the HPPC objectives, the CDC application objectives provide a comprehensive set of activities that can be expected of the AO/HPPC collaboration. The strongest effect of this collaboration will be felt by providers as they experience new expectations regarding risk assessment, client needs assessment, evaluation, and a priority on the highest risk populations.

Prevention Objectives for 1997

In developing the 1996 Request for Proposals (RFP) for HIV prevention programs, the AIDS Office charged the HPPC with forming recommended objectives for prevention in 1997 and beyond that reflect the city-wide changes. These objectives outline the components that shape the vision of how HIV prevention should look in the coming years. These include focusing on behavioral risk populations, assessing risk behavior, standardizing data collection, developing and strengthening linkages, and providing comprehensive services to people at highest risk.

1. Providers will describe their target populations primarily by the behaviors that put them at risk for HIV as defined by the Priority-Setting Chapter so that:
 - a) those engaging in the highest risk behaviors are targeted; and
 - b) strategies and interventions focus on changing behavior.
2. Using standardized variables, providers will collect and record sociodemographic information about their target populations, changes in behavior, and units of service so that progress toward prevention goals can be measured and analyzed across all HIV prevention providers.

Providers will assess and document, at least once per year, the following characteristics of their target populations:

- a) risk behaviors;
- b) co-factors (biological, psychological, behavioral, social/situational, economic and access-related); and
- c) perception of personal risk.

Needs assessments will be conducted in order to:

- a) identify and utilize the interventions that are most the appropriate and effective for preventing HIV in the population targeted; and
- b) form baseline data for evaluation of program impact.

3. In order to design the most effective prevention programs, providers will
 - a) use behavior theory; and
 - b) consider the relevant co-factors of their target populations when selecting strategies and interventions for HIV prevention.
4. The AIDS Office will ensure that each behavior group is reached by a range of strategies and interventions in order to meet diverse needs and increase the likelihood that prevention messages will have an impact.
5. Providers will develop and strengthen linkages with other agencies so that:
 - a) appropriate referrals can be made;
 - b) providers can document the outcome of referrals;
 - c) a continuum of services is ensured; and
 - d) multiple interventions are provided.

V. CONCLUSION

It is clear that the development of goals and objectives and, by extension, the work of the HPPC have been a progressive effort during the first three years of the HIV prevention planning process. Each year established a framework based on evaluation of past years' achievements, all the while maintaining a focus on the overarching goals. The three sets of goals and objectives for the future, outlined in the previous section, reflect the commitment to and reliance on the concepts developed in the first year of community planning. These core concepts comprise the basis for reshaping HIV prevention in San Francisco:

- Develop a city-wide evaluation plan;
- Develop a client-level behavioral risk assessment;
- Ensure that providers receive the technical assistance necessary to their programs;
- Standardize units of service;

- Strengthen linkages among providers;
- Focus prevention strategies and interventions on individuals at highest risk; and
- Require that providers use the Plan as guidance for program development and modifications.

Goals and objectives are critical for providing a vision and structuring the work to be carried out by the Council and its committees. The individual chapters of this Plan describe the work of each of the committees.

The 1997 HPPC goals and objectives build on the prior years' accomplishments and set an agenda for future work of the Council, the AIDS Office and the prevention communities. The Goals and Objectives Committee played a central role in determining the Council's progress on its planned activities and establishing the process objectives for 1997. The following summarizes the major areas of activity proposed in the 1997 HPPC process objectives:

- Review and update as necessary: research priorities, the resource inventory, and the Plan, to reflect Council activities;
- Assure representativeness of Council membership, and assess and adjust operating procedures;
- Assure coordination between providers through consistent prevention messages and strengthened linkages and referral systems;
- Review and make recommendations regarding the priority-setting process and resource allocation process;
- Provide input in the monitoring of program implementation;
- Review research projects;
- Provide guidance on the implementation of technical assistance and the strategic evaluation plan; and
- Monitor progress on HPPC objectives and develop future goals and objectives.

The 1997 HPPC goals and objectives call for high levels of community input in all facets of HIV prevention. Furthermore, they represent the HPPC's continuing assessment and evaluation of HIV planning in San Francisco.

CHAPTER 3 - EPIDEMIOLOGIC PROFILE

I. INTRODUCTION

The Acquired Immune Deficiency Syndrome (AIDS) epidemic in the United States continues to evade the best efforts of scientists to find either an effective vaccine or a cure. Since its identification in the early 1980s, behavioral change strategies have come to represent the best hope of halting the further spread of HIV. In the event that a vaccine or cure is discovered, targeted prevention programs will continue to play a significant role in efforts to prevent new infections.

The challenge for prevention efforts is to identify the groups at highest risk for infection, the behaviors that place them at risk, the psychosocial and/or cultural factors that increase their risk, the strategies and interventions most likely to reduce risk, and the community structures that best assist agencies in working together to end the epidemic. Each of these elements—risk, strategies and interventions, and community collaboration—are discussed in this Plan. This chapter focuses on risk; it presents a comprehensive description of the HIV epidemic in San Francisco.

What is Contained in this Chapter

The epidemiologic profile begins with this introduction and a description of the sources of information used in the chapter. It continues in Section II with a description of San Francisco and its people—all people, regardless of risk—in order to orient the reader who may be unfamiliar with the neighborhoods of the city. The chapter continues in Section III with estimates of the size of behavioral risk populations by ethnicity and age group. Section IV summarizes information from the AIDS Case Registry in San Francisco, including both cumulative AIDS cases and recent cases.

While, for many jurisdictions in the United States, the AIDS case data may be the only data available from which to draw a portrait of the epidemic, in San Francisco a great many prevalence studies have been conducted, and these are summarized in Section V of this chapter. Section VI contains estimates of HIV prevalence among select groups. Section VII summarizes the behavioral risk studies that have been conducted in San Francisco, and Section VIII outlines studies in progress. Recognizing that behavior is often influenced by social, psychological, and cultural factors, Section IX contains a description of relevant “co-factors” that may increase risk for specific groups of people. The section on co-factors was developed in the second year of the planning process and issued separately in the Priority-Setting chapter in 1995. In this fully revised version of the Plan, the co-factor information has been updated and moved to the Epidemiologic Profile. Section X describes the Epidemiology and Research Committee, its tasks and decision making process. Section XI contains recommendations developed by the Committee and adopted by the HIV Prevention Planning Council (HPPC). These

recommendations prioritize future research studies. The Chapter concludes with Section XII, Summary and Future Directions.

Types of Information Used in the Epidemiologic Profile

This Epidemiologic profile is drawn from many sources: census data, population estimates, the AIDS case registry, prevalence studies, behavioral studies, surrogate markers, and key informant interviews. Each type of information has its own strengths and limitations. These are outlined below.

Information about AIDS

AIDS case registry - An AIDS case registry is kept by each public health jurisdiction and contains basic demographic and transmission risk information about those diagnosed with AIDS.

- **Strength:** The most comprehensive source of information about past HIV infection; it includes most cases.
- **Limitation:** Due to the long incubation period of HIV disease, AIDS case data reflect infections of many years past. The categories used for reporting purposes may result in underreporting of certain populations, or no reporting for certain populations (such as the homeless). The categories used for reporting purposes were established by the CDC and are based on transmission risk groups, rather than the behavioral risk populations used by the HPPC. The AIDS case definition was changed in 1993 to include diagnostic conditions experienced more often by women and a CD4 count-based criterion. These changes make subsequent AIDS case trends difficult to compare to pre-1993 trends, but give a more accurate picture of the epidemic.

Information about HIV

Prevalence studies - These studies are conducted to determine the percentage of persons in a specific group infected with HIV at a specific point in time.

- **Strength:** Information from prevalence studies provides more current rates of infection than AIDS case data, since the studies test for HIV infection.
- **Limitation:** These studies are costly to conduct; therefore, they can be conducted only with a few groups. While prevalence studies provide the percentage of HIV-positive individuals in the studied population, they cannot accurately reflect the number of *new* infections in a given time period. For example, much of the HIV prevalence found among older men gay men reflects infection that occurred in the 1980s.

Incidence studies - These studies are conducted to determine the rate of new infections in a specified time period.

- **Strength:** Incidence studies provide information about the number of new infections. They are the best source of information with which to understand the

current epidemic and to predict trends. Another strength is that, in the course of conducting incidence studies, researchers gather prevalence data as well.

- Limitation: These studies are very expensive and methodologically very difficult to conduct—even more so than prevalence studies. Therefore, they can be conducted only for small pockets of the populations where prevalence rates are known to be high.

Sentinel seroprevalence surveillance - Certain populations, such as persons entering methadone clinics, health clinics (prenatal, TB, and STD), jails or prisons, job corps programs, or the military, have been chosen for sentinel surveys. These studies ascertain the percentage of HIV-positive persons in each group at a specific point in time and are usually repeated at the sites over the course of several years.

- Strength: As with other HIV prevalence studies, sentinel serosurveys reflect more recent infections than do AIDS case registry data. Because they are repeated annually for several years, they are representative of the populations who access these sites.
- Limitation: These studies are conducted only among small pockets of the populations at the sentinel sites; thus, the information is not generalizable to populations who do not access the sentinel sites.

Counseling and testing data - HIV is not a reportable disease in California, but publicly-funded testing sites collect and report basic demographic information and test results from persons using the services.

- Strength: As with all HIV data, counseling and testing data reflect more recent infections than AIDS case data.
- Limitation: Unlike prevalence or sentinel studies, counseling and testing data contain a strong selection bias. Because these data are reported by over 100 sites in San Francisco, collection and reporting standards vary. Due to present discrepancies in reporting these data in 1994-1996, this information is not included this year in the Epidemiologic profile.

Information about Risk for HIV Infection

Behavioral studies - These studies do not test for HIV infection, but rather query participants in the study population about the nature and extent of their risk behaviors.

- Strength: Can be conducted on most populations. Indicates who potentially may contract HIV; important for prevention planning and evaluating interventions. Behavior studies generally are less expensive to conduct than prevalence or incidence studies.
- Limitation: Studies vary in quality, comprehensiveness, and types of behaviors measured. They are conducted among populations selected by the researchers, who often rely on convenience sampling. The studies do not always match the behavioral risk populations used by the HPPC for planning and priority-setting and are not always generalizable or representative. Differences in measures and methods of the risk behavior make it difficult to summarize results across studies.

Focus groups - Focus groups are conducted for a wide variety of purposes, one of them being to inform providers and researchers about HIV risk practices in target populations. Focus groups bring a group of persons together, using specific recruitment techniques, and ask them specific questions.

- **Strength:** Can probe into the reasons for people's actions or thoughts and psychosocial factors that are difficult to measure with surveys. Focus groups are generally less expensive than prevalence, incidence, and behavior studies.
- **Limitation:** It is difficult to compare the findings between different groups. The findings are not representative of the entire population from which the focus group members are drawn.

Key informant interviews - Persons who are expected to know a great deal about the population are interviewed using a common set of questions with each informant.

- **Strength:** These interviews are a relatively inexpensive method of finding out information about a population for which few studies exist.
- **Limitation:** Information obtained from key informant interviews is not representative of the population about which the informant is speaking.

Indirect indicators of risk

Surrogate markers - Surrogate markers are diseases or conditions known to public health officials to follow the pattern of the HIV epidemic. These markers, such as STDs, teen pregnancy, and TB, can provide information about the movement of the HIV epidemic if they are directly associated with HIV infection (i.e., STDs, TB) or if they mask behaviors associated with HIV transmission (e.g., teen pregnancy)—such as prior to the development of the HIV antibody test or when a prevalence study is too expensive or impractical. Some surrogate markers are very good for predicting HIV infection (e.g., STDs), but others are less reliable (e.g., TB and teen pregnancy).

- **Strength:** These markers indicate who may be at risk. Some surrogate markers (i.e., STDs) indicate direct (biological) risk and others indicate indirect (behavioral) risk.
- **Limitation:** Are not always specific to HIV. Some are better indicators of risk than others.

Co-factors - As the Council defines them, co-factors are biological, behavioral, psychological, social, or situational factors that can increase an individual's risk for HIV or decrease an individual's ability to act upon prevention messages. Some co-factors, such as STDs, are also surrogate markers.

- **Strength:** Co-factors provide additional information about the increased psychosocial risk that various groups face. While behavior determines risk, psychosocial factors often influence behavior and thus are vital to a deeper understanding of HIV risk.
- **Limitation:** Co-factors do not provide information about the direct risk of HIV. Some co-factors seem to play a more important role in predicting risk for HIV, while others have only a tangential role. Studies that include measures of co-

factors are difficult to compare across populations, and an accurate sense of the actual importance of a co-factor is impossible to gain, especially across population groups.

Information about size and characteristics of the population

Census information - The U.S. government conducts a census, or counting, of the U.S. population every ten years. The demographic information is made available in a variety of formats.

- **Strength:** The census is conducted throughout San Francisco. It gives an estimate of population size and basic demographic characteristics. It is the most commonly cited source of information about the size and demographic characteristics of the population.
- **Limitation:** The census is conducted only every ten years. It does not collect information about many important characteristics (e.g., sexual orientation). It does not adequately capture information about populations without a permanent residence.

Population size estimates - As a part of the first year planning process, estimates were made of the size of the HPPC risk behavior populations. This was done by imposing estimates of the size of different risk groups (which were obtained from a number of surveys and studies and discussed in the Consensus Report) on current census data; this resulted in estimates of risk behavior population size by age and ethnicity.

- **Strength:** Estimates of population size are useful in conjunction with epidemiologic information for prevention planning and priority-setting, and can make comparisons between groups possible.
- **Limitation:** Estimates of the size of these groups are based on census data (see limitations of census data), and several assumptions (which may or may not be true) are made when determining estimates (particularly for populations based on sexual and drug-using behaviors). Some estimates, such as the estimated size of the gay/bisexual male population, were based on outdated population surveys.

1992 Consensus Report - In 1992, the AIDS Office convened a panel of researchers to bring together as many estimates of HIV infection as possible. Researchers presented and discussed findings from San Francisco studies focusing on similar populations. They used the range of findings in these studies to estimate HIV prevalence and incidence in different populations, especially gay/bisexual men, injection drug users, and non-IDU heterosexuals.

- **Strength:** The Consensus Report summarizes the most current research (as of 1992) in a format that can inform planning and policy decisions.
- **Limitation:** It is based on expert opinions of various studies which have different target populations and methods.

HIV prevalence estimates - The Seroepidemiology and Surveillance Branch of the AIDS Office imposed population size estimates of the HPPC risk behavior groups on the

Consensus Report's estimated of rate of HIV infection. This resulted in prevalence estimates for the different behavioral risk populations, age groups, and racial/ethnic groups used by the HPPC.

- Strength: Uses the Consensus Report estimates to translate traditional risk group definitions (e.g., gay/bisexual men, IDUs, heterosexual adults) into HPPC-defined behavioral risk populations. Can be used for comparison purposes.
- Limitation: Only an approximation of infection. Estimates of infection are based on other estimates and are very unstable (e.g., population estimates and transmission group estimates). Many assumptions are made when calculating these estimates.

Most of the types of information outlined above is used in this chapter. Different sections rely on different types of information. For example, the section describing San Francisco and its people relies on census information and population size estimates. There are sections using almost exclusively prevalence data or behavioral studies. Other sections, such as the Co-factors section, use information from a variety of sources. Please refer to the Glossary of Terms at the end of the Plan for the meaning of technical terms used in this chapter.

Exhibit 3.1

San Francisco's 15 Planning Districts and the Neighborhoods that Comprise Them



II. SAN FRANCISCO AND ITS PEOPLE

Introduction

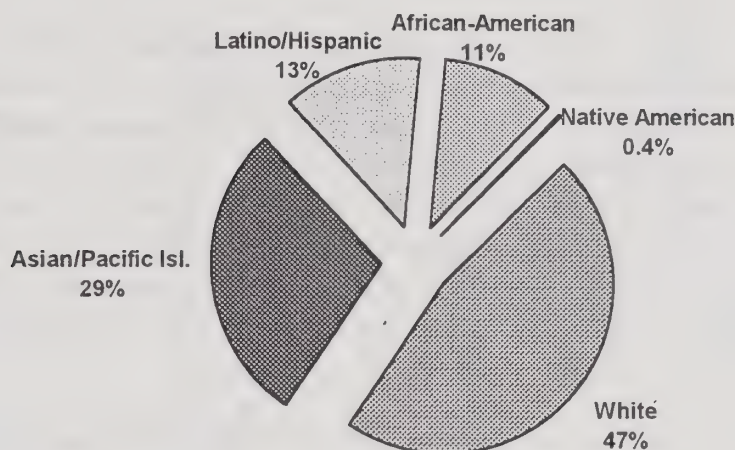
San Francisco, California is the fifth largest metropolitan region in the United States. It has the highest rates of AIDS cases to population size of any U.S. incorporated city. The City is well-known for its diverse and multicultural population, dramatic geography, and progressive thinking. With a total area of 45.5 square miles, the City sits at the northern tip of a peninsula that divides the Pacific Ocean and the San Francisco Bay. San Francisco County is one of seven neighboring counties that comprise the San Francisco Bay Area. The City is one of the most densely populated areas in California, with close to 16,000 persons per square mile. San Francisco is also one of the cities most frequently visited by international tourists; other major industries include services, retail, finance and insurance, and wholesale trade.

There were 723,959 people living in San Francisco at the time of the 1990 census, a 6.6% increase above the 1980 census (Census of Population and Housing, 1990). This increase in the population is the first since the 1950 census, and appears to be an ongoing trend (Office of Analysis and Information Systems, 1991a). A more current population estimate from the Association of Bay Area Governments (ABAG) is 767,259, which includes the 1990 census figure plus 43,300 people who have become San Francisco residents between 1990 and 1995 (ABAG Draft Projections, 1994).

The diversity of San Francisco's population contributes immensely to its unique character. People of many ethnic backgrounds, countries of origin, sexual orientations, and gender orientations comprise the population. Exhibit 3.2 below shows the racial/ethnic distribution of the population.

Exhibit 3.2

Race/Ethnicity of San Francisco Residents.



Source: Census of Population and Housing, 1990.

Of the total population, 47% identify as non-Hispanic White, 11% identify as non-Hispanic African American, 29% identify as non-Hispanic Asian/Pacific Islander, 13% identify as Latino/Hispanic, and 0.4% identify as Native American/Alaska Native (Census of Population and Housing, 1990). Further breakdown of the Asian/Pacific Islander communities reveals that, of this 29%, 18% are Chinese, 6% are Filipino, 2% are Japanese, 2% are of Southeast Asian origin, 1% are Korean, and 0.4% are of Pacific Islander origin.

In the past decade, the racial and ethnic diversity of San Francisco has increased significantly. The most substantial population growth between 1980 and 1990 occurred within the Asian/Pacific Islander communities (41%) and the Latino/Hispanic communities (21%). San Francisco, for the first time in its history, is now a “minority majority” city: the non-Hispanic White population is less than half of the total (Office of Analysis and Information Systems, 1991a).

San Francisco is generally known as a safe haven for gay, lesbian, and bisexual people. Although sexual orientation is not assessed in census data, it is commonly estimated that 14% of the population is gay or lesbian. Transgender communities also make a significant contribution to the City’s diversity. There is no accurate count of the transgender population living in San Francisco. However, an estimate provided by the Transgender Community Task Force suggests that there are approximately 6,000-8,000 transgender people (1% of the total city population) living in San Francisco (Whitlock, 1995).

Many people live in San Francisco who were originally from other places. This also contributes to the City’s diversity and character. Youth, in particular runaways, are drawn to San Francisco from other places in the U.S. Many people find San Francisco a welcoming city, but do

not choose to live here year-round; they may migrate between the east and west coasts, or up and down the west coast. Additionally, people migrate to the city for work and live here only when work is unavailable in other places

San Francisco Neighborhoods

San Francisco is comprised of 39 distinct residential neighborhoods, which have unique characteristics created by the groups that live and congregate in them. As illustrated in Exhibit 3.1 on the first page of this section, these areas are grouped into 15 city planning districts. These planning districts and the neighborhoods that comprise them are: 1) the Richmond; 2) the Marina and Pacific Heights; 3) Chinatown, Nob Hill, Russian Hill, North Beach; 4) the Tenderloin/Civic Center; 5) the Western Addition; 6) Haight-Ashbury; 7) the Castro and Noe Valley; 8) the Mission; 9) China Basin, Potrero Hill, South of Market; 10) Bayview Hunter's Point; 11) Bernal Heights; 12) the Outer Mission, Visitación Valley, and the Excelsior; 13) Ingleside and Ocean View; 14) the Inner Sunset; and 15) the Outer Sunset.

The following section describes the planning districts. These short descriptions note each planning district's neighborhoods, physical geography, ethnic composition, percentage of residents living in poverty, percentage of youth living in poverty, and aspects that distinguish it from other areas. The data for these descriptions were obtained from the City's Office of Analysis and Information Systems (1991a, 1991b), which used 1990 Census findings for its reports. Using these data it is not possible to disaggregate the percentage of Native American from Asian/Pacific Islander residents in each district. Although the small overall proportion of San Francisco's population that identifies as Native American makes it difficult to note areas where this ethnic group is concentrated, the few areas of the City where a significant percentage of this population lives receive mention. Exhibit 3.3, on the following page, maps the distribution of ethnic groups across neighborhoods and planning districts. Exhibit 3.4 is a map of the percentage of people living below the poverty level.

Exhibit 3.3.a
Percentage Distribution of African Americans
by San Francisco's 15 Planning Districts

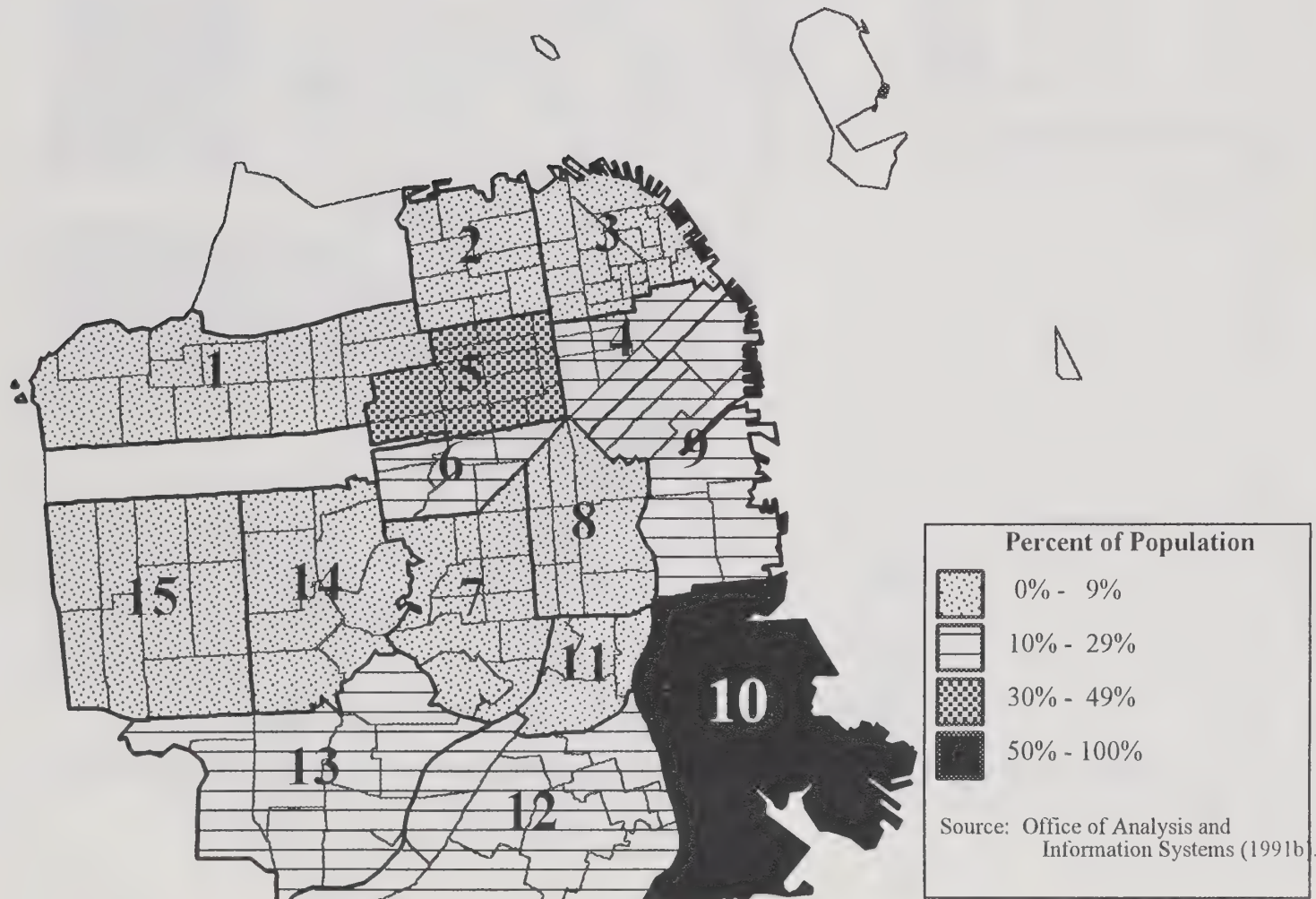


Exhibit 3.3.b

Percentage Distribution of Asian/Pacific Islanders and Native Americans
by San Francisco's 15 Planning Districts

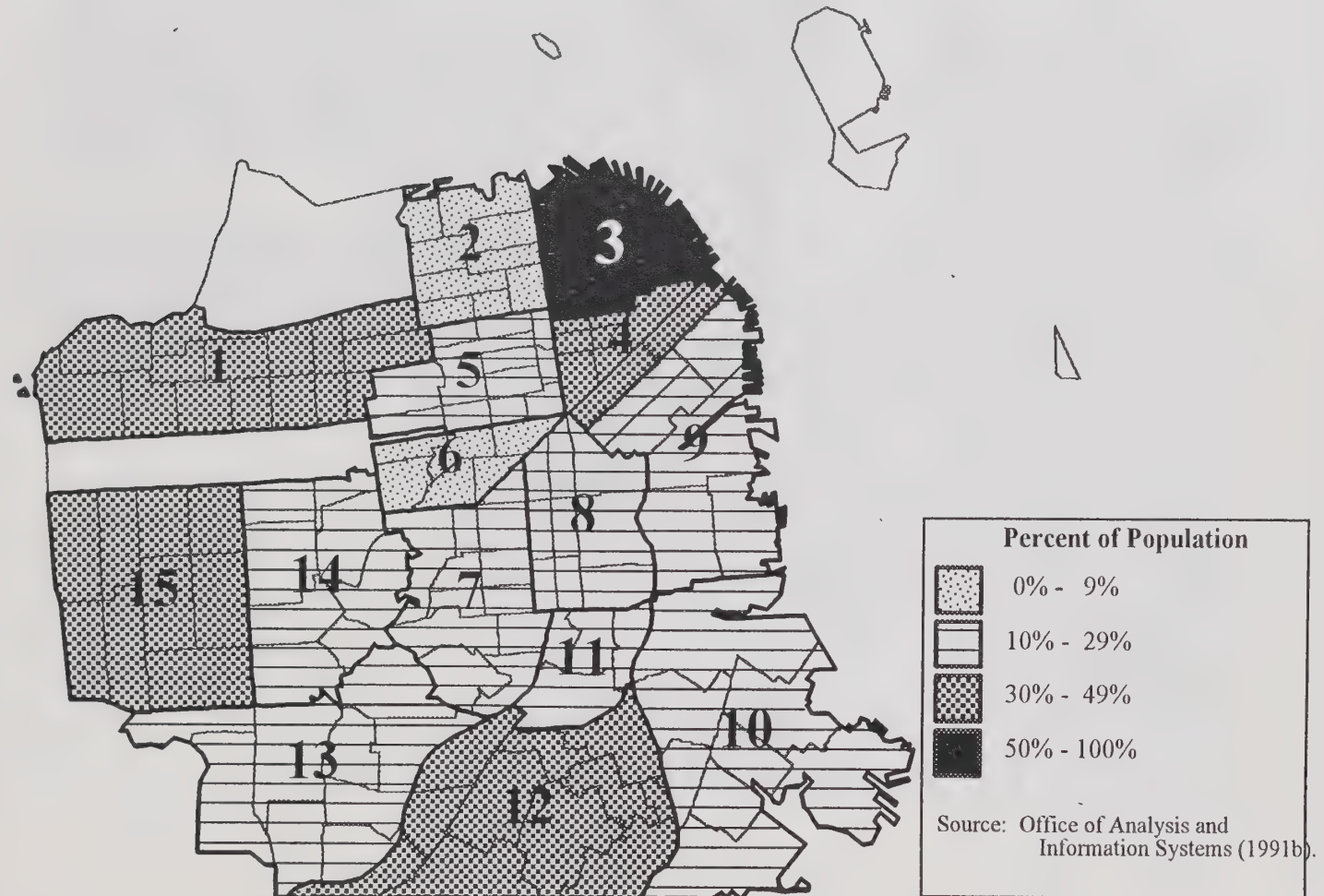


Exhibit 3.3.c
**Percentage Distribution of Latino/Hispanics
 by San Francisco's 15 Planning Districts**

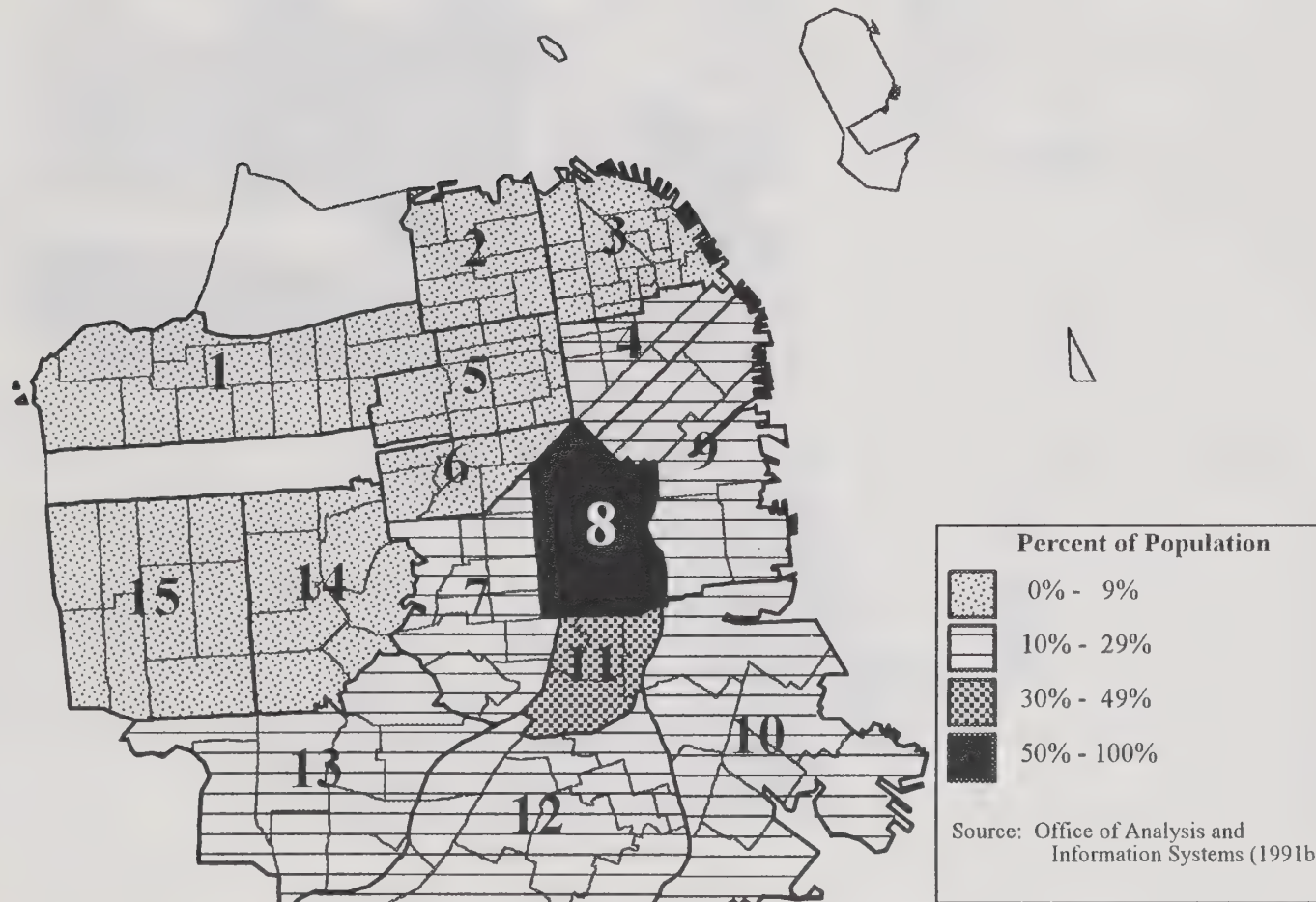
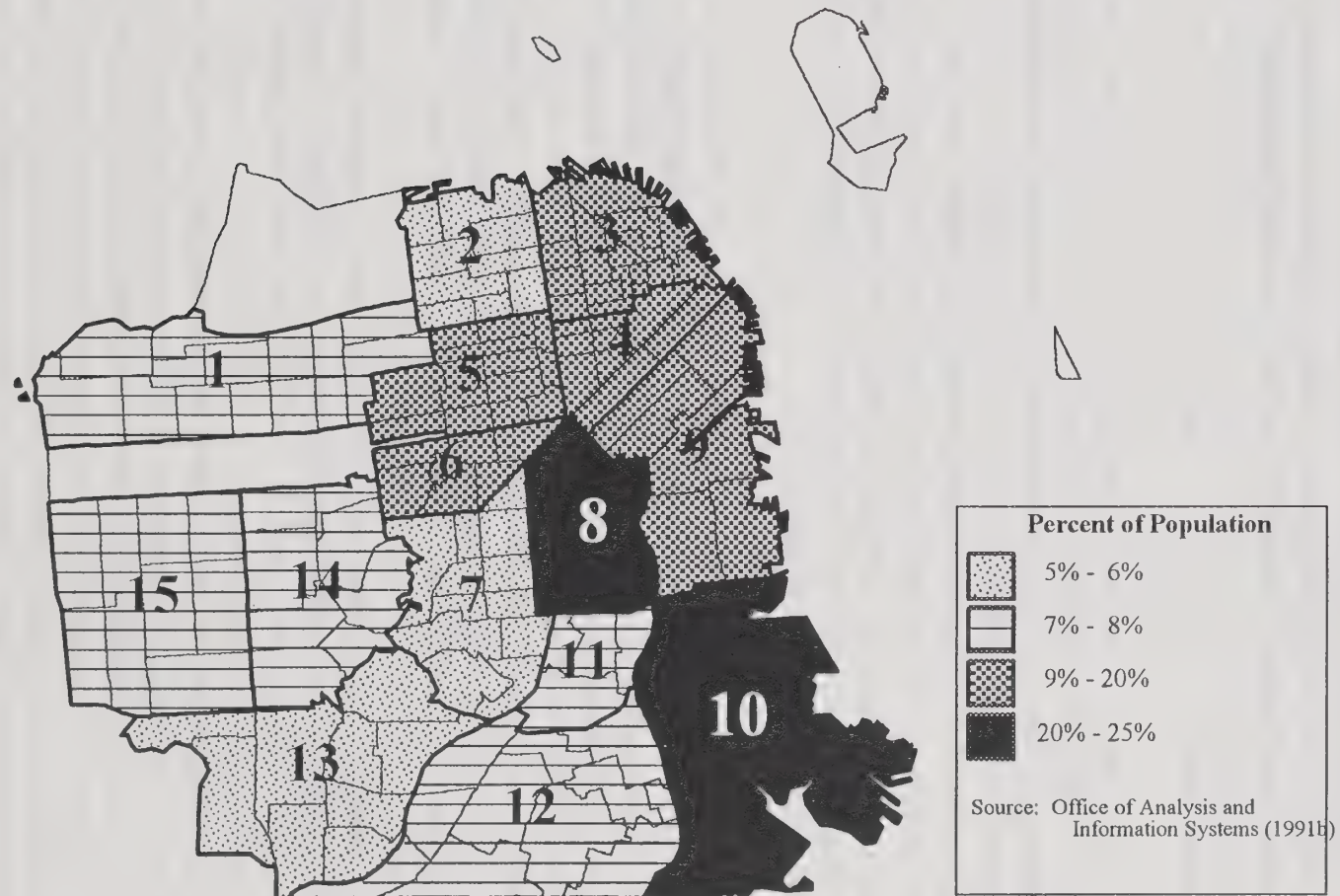


Exhibit 3.3.d

Percentage Distribution of Whites
by San Francisco's 15 Planning Districts



Exhibit 3.4
Percentage of People Living Below the Poverty Level
by San Francisco's 15 Planning Districts



The **Richmond and Sunset Districts** (planning districts 1, 14, and 15) are bordered by the Pacific Ocean to the west, and flank the north and south sides of Golden Gate Park. The residential composition of these districts is 52% White, 40% Asian/Pacific Islander, 6% Latino/Hispanic, and 3% African American. Asian/Pacific Islander communities have a strong presence in these districts and influence the overall culture. In fact, 36% of San Francisco's Asian/Pacific Islander residents live in the Richmond and Sunset Districts. Seven percent of the neighborhoods' residents and 8% of the youth live in poverty.

The **Marina District and Pacific Heights** (planning district 2) are in the center of the northern tip of the San Francisco peninsula, towards the Golden Gate which opens the Bay. These sparsely populated neighborhoods are predominately White (86%), with limited representation of other ethnic groups (9% Asian/Pacific Islander, 4% Latino/Hispanic, and 2% African American). The proportion of these areas' residents under the age of 18 years—2%—is the lowest of all San Francisco neighborhoods. Along with the Castro and Noe Valley areas, the proportion of residents living in poverty is the lowest in San Francisco (5%). Generally, the Marina District is populated by young professionals. Pacific Heights is perched high on a hill overlooking the Marina and the Bay, and is home to professionals with families.

Planning District 3 is comprised of **Chinatown, Nob Hill, Russian Hill, and North Beach**. Although each of these areas are distinct, aggregate demographic information is presented here. Overall, the ethnic composition of these areas is 53% Asian/Pacific Islander, 42% White, 3% Latino/Hispanic, and 2% African American. Chinatown draws a significant Asian/Pacific Islander community—17% of the City's Asian/Pacific Islander people live in this area—while the nearby Nob Hill, Russian Hill, and North Beach areas are predominately White. The proportion of Chinatown residents living in poverty—16% in general and 19% of youth—is high compared to its surrounding areas, which may be explained by the high number of recent Asian/Pacific Islander immigrants.

The **Tenderloin/Civic Center** neighborhood (planning district 4) is situated just west of downtown San Francisco and the Financial District. The ethnic composition of this area roughly corresponds to the overall city demographics—46% White, 34% Asian/Pacific Islander, 11% Latino/Hispanic, and 10% African American—yet is also known to comprise a significant proportion of San Francisco's Native American population (Comprehensive Housing Affordability Strategy, 1994). The Tenderloin has a high proportion of residents living in poverty—20% of the total area population and 18% of the neighborhood youth. However, it is one of the few areas in San Francisco where the proportion living in poverty is lower for youth than for residents in general. Both male and female street-based sex industry workers work in this area, and many homeless adults and youth congregate here. Many transgendered persons live in the area as well.

The **Western Addition** (planning district 5) is situated between the Richmond District to the west and the Tenderloin to the east. Second only to the Bayview/Hunter's Point area, the Western Addition is home to a high proportion of African Americans, (19% of San Francisco's African American population). Of this neighborhood's residents, 30% are African American, 45% are White, 17% are Asian/Pacific Islander, and 7% are Latino/Hispanics. While 19% of Western Addition

residents live in poverty, its child residents fare worse; 35% of its youth under the age of 18 years live in poverty.

The **Haight-Ashbury** (planning district 6) is directly east of Golden Gate Park, and became famous in the 1960s as a mecca for hippies and radical activists. This neighborhood is predominately White (71%), but includes 14% African Americans, 8% Asian/Pacific Islanders, and 7% Latino/Hispanics. Of the neighborhood residents, 12% in general and 10% of its youth are living in poverty, making it another of the few areas where the proportion of youth living in poverty is lower than the proportion for residents in general. However, it should be noted that there is a large pocket of homeless youth in this neighborhood that are shown in Census data.

The **Castro and Noe Valley** neighborhoods (which form planning district 7 with **Diamond Heights and Glen Park**) are home to many of San Francisco's gay, lesbian, and bisexual residents. These neighborhoods are located on the north and south sides of a large hill in the most central part of San Francisco. This area's ethnic composition is largely White (72%) compared to the City as a whole; representation of other ethnic groups includes 14% Latino/Hispanics, 10% Asian/Pacific Islanders, and 4% African Americans. Along with the Marina and Pacific Heights, these areas have the lowest proportion of residents living in poverty (5%). The proportion of neighborhood youth living in poverty is the second lowest at 5%. The cultures of the Castro and Noe Valley reflect the pride that San Francisco's gay, lesbian, and bisexual communities feel about their identity.

The **Mission District** (planning district 8) is situated to the east of Noe Valley. The Mission is populated and culturally influenced by people of Mexican and other Latin and Central American cultures, including both recent immigrants and those who have lived in the U. S. for generations. A significant proportion of San Francisco's Native American population also resides here (Comprehensive Housing Affordability Strategy, 1994). Overall, 52% of the Mission's population is of Latino/Hispanic origin, 30% is White, 14% is Asian/Pacific Islander, and 5% is African American. The proportion of Mission residents who are under the age of 18 years (21%) is higher than most other areas in the City. The economic disadvantages that many immigrant groups face are reflected in the proportion of area residents living in poverty: the Mission (along with Bayview/Hunter's Point) has the highest proportion 25%—of residents living in poverty. This figure is even higher, at 31%, for those under the age of 18 years.

The **South of Market, China Basin, and Potrero Hill** areas (planning district 9) comprise the northeastern bayside of San Francisco. Their proximity to the Bay contributed to their development as San Francisco's major industrial—rather than residential—areas. As such, they are not as densely populated as many other City neighborhoods. Ethnically, these areas are 54% White, 17% African American, 17% Asian/Pacific Islander, and 11% Latino/Hispanic. The Potrero Hill neighborhood specifically is also known to comprise a significant proportion of the Native American population in San Francisco (Comprehensive Housing Affordability Strategy, 1994). The proportions of people living in poverty are high for both the resident population in general and youth, at 20% and 24%, respectively. These poor economic conditions are coupled with poor housing conditions, particularly in the South of Market and China Basin areas. However, the City's administration has recently announced their intention to develop and improve these areas for residential purposes.

Bayview/Hunter's Point (planning district 10) occupies the southeastern stretch of San Francisco's bay front. This neighborhood has similar roots in industry to those of the South of Market and China Basin areas. Sixty percent of neighborhood residents are African American, and 23% of San Francisco's African American population live in this area. The representation of other ethnic groups includes 21% Asian/Pacific Islanders, 10% Latino/Hispanics, and 9% Whites. Proportions of people living in poverty in this area are the highest of all neighborhoods for both the general resident, at 25% (equivalent to the Mission), and for youth residents at 39%. Compared to all other San Francisco neighborhoods, the Bayview/Hunter's Point area has the highest proportion of residents under the age of 18 (37%).

Five neighborhoods—**Bernal Heights, Outer Mission, Visitación Valley, Excelsior, and Crocker Amazon**—to the west of Bayview Hunter's Point and surrounding McLaren Park, comprise planning districts 11 and 12. These neighborhoods are home to significant proportions of people of color. Specifically, the ethnic composition is 35% Asian/ Pacific Islander, 29% Latino/ Hispanic, 26% White, and 10% African American. Proportions of people living in poverty in these neighborhoods are relatively low compared to many other areas in the City: 7% of the residents in general and 8% of youth live in poverty. Overall, the proportion of youth under the age of 18 years living in these areas is slightly higher than the overall total for San Francisco (23% compared to 16%).

Lastly, **Ingleside, Ocean View, Mt. Davidson, and Merced** neighborhoods (planning district 13) cover the southwest corner of San Francisco. These neighborhoods, like those in districts 11 and 12, are also home to proportionately more people of color compared to overall City demographics. Ethnically, these neighborhoods are 44% White, 26% Asian/ Pacific Islander, 19% African American, and 11% Latino/Hispanic. The proportion of people living in poverty in these areas is much lower than in many other areas which are heavily populated by people of color: 6% of the total population and 9% of youth in these neighborhoods live in poverty.

Consideration of the distribution of ethnic groups across San Francisco's neighborhoods reveals certain trends. The population of White residents is most highly concentrated in the Marina, Pacific Heights, Castro, Noe Valley, the Financial District and China Basin. While residents of Asian/Pacific Islander origin live in moderate proportions in most neighborhoods, the highest concentrations are in Chinatown, the Richmond, and the Sunset District. Between the 1980 census and 1990 census, African American residents became more evenly distributed across San Francisco neighborhoods; nonetheless, higher concentrations remain in the Bayview Hunter's Point, the Western Addition, and Ingleside. People of Latino/Hispanic origin live in very similar proportions in almost all San Francisco neighborhoods, with the exception of the Mission District and neighborhoods to the south and southwest of the Mission, where a strong Latino/Hispanic influence and population remains. It is likely, however, that an analysis of acculturation and language use at home would reveal that more recently arrived immigrants live in the Mission, while more acculturated Latinos have dispersed to other areas.

Exhibit 3.5 on the following page provides a summary of San Francisco planning districts and the neighborhoods they comprise with the ethnic composition, percentage living in poverty, and

percentage of youth living in poverty. Two additional statistics—percentage of the population under the age of 18 years—and population density, are also included

Exhibit 3.5
Summary of San Francisco Neighborhoods

Planning District(s)	Neighborhoods	% Af-Am	% A/PI/NA*	% Lat/Hisp	% White	% in Poverty	% Youth in Poverty	% Youth	Pop. Density**
1, 14, 15	Richmond, Sunset	3%	40%	6%	52%	7%	8%	17%	22.1
2	Marina, Pacific Heights	2%	9%	4%	86%	5%	2%	2%	35.7
3	Chinatown, Nob Hill, Russian Hill, North Beach	2%	53%	3%	42%	16%	19%	11%	57.5
4	Tenderloin/Civic Center	10%	34%	11%	46%	20%	18%	11%	50.2
5	Western Addition	30%	17%	7%	45%	19%	35%	13%	44.0
6	Haight-Ashbury	14%	8%	7%	71%	12%	10%	12%	45.2
7	Castro, Noe Valley, Diamond Heights, Glen Park	4%	10%	14%	72%	5%	5%	11%	30.0
8	Mission	5%	14%	52%	30%	25%	31%	21%	47.4
9	South of Market, China Basin, Potrero Hill	17%	17%	11%	54%	20%	24%	17%	8.6
10	Bayview/Hunter's Point	60%	21%	10%	9%	25%	39%	37%	8.9
11, 12	Bernal Heights, Visitación Valley, Excelsior, Crocker Amazon	10%	35%	29%	26%	7%	8%	23%	31.4
13	Ingleside, Ocean View, Mt. Davidson, Merced	19%	26%	11%	44%	6%	9%	18%	14.5

Source: Office of Analysis and Information Systems (1991b).

* A/PI/NA = Asian/Pacific Islanders and Native Americans.

** Population Density figures refer to persons per acre.

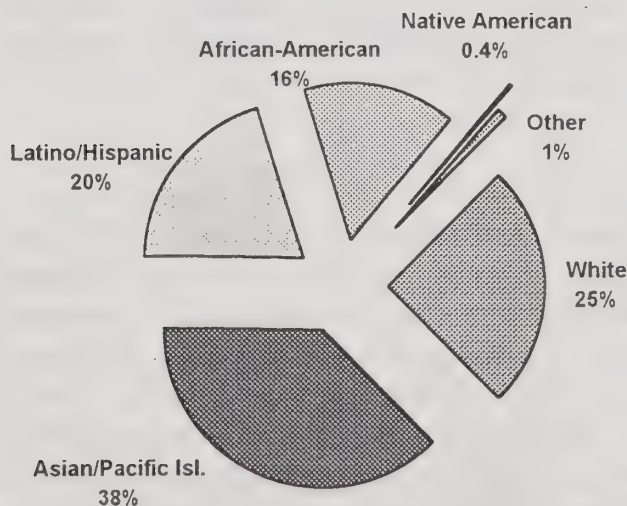
Description of Special Populations

An overview of San Francisco's neighborhoods provided a glimpse into the City's ethnic and geographic diversity. However, a more full comprehension of the richness of this multicultural city's diversity emerges from discussion of some of the special population groups that comprise it.

Youth

San Francisco's population of people under the age of 18 years numbers approximately 117,119 and accounts for 16% of the overall population (Census of Population and Housing, 1990). This proportion of youth is lower than that found in any other city in the country, and is much lower than the 26% national average. As Exhibit 3.6 shows, the ethnic/racial composition of San Francisco youth is 38% Asian/Pacific Islander, 25% White, 20% Latino/Hispanic, 16% African American, 0.4% American Indian, Eskimo, or Aleut; and 1% from a different racial/ethnic heritage. This ethnic/racial distribution is different from the overall San Francisco population, in that the proportion of children of color is greater than the proportion of White children.

Exhibit 3.6
Race/Ethnicity of San Francisco Youth Under Age 18



Source: Census of Population and Housing, 1990.

Overall, young people in San Francisco are poorer than the national average. In San Francisco, 20% of children live on AFDC, compared to 12% nationally. The number of homeless youth living in shelters and on the streets in San Francisco is estimated to be close to 2,000 young people on any given night (San Francisco Homeless Youth Network, 1995). This estimate is consistent with the State Comprehensive Homeless Assistance Plan's estimation that 5-10% of the

homeless statewide were runaway youths. Coleman Advocates (1993) further estimate that across a one-year time period, there are 5,000 homeless youth on San Francisco's streets.

In a 1995 mid-year report, the San Francisco Homeless Youth Network—comprised of Central City Hospitality House, Larkin Street Youth Center, and Youth Advocate's Huckleberry House—served 1,330 unduplicated homeless young people between the ages of 10 and 21 years old, during a six month period. Of these youth, 77% were under the age of 18 years, 48% were White, 22% were African American, 16% were Latino/Hispanic, 4% were Asian/Pacific Islander, and 2% were Native American. Of these youth who received services, 48% were female and 52% were male.

A gross distinction is generally made in reference to youth who do not have a stable living situation: those who are able to return home (runaways) and those for whom returning home is not an option, because of abuse or the family's inability to provide for the young person (i.e., homeless youth). It is estimated that about 38% of the population of youth on the streets in San Francisco are runaways and 62% are homeless (Mayor's Office on Homelessness, 1996). In general, these youth tend to congregate in the Haight-Ashbury and Tenderloin/Civic Center Districts, although young gay, lesbian, and bisexual street youth often gravitate to the Castro District. Youth-specific social and health-related services are available in each of these areas.

The San Francisco School District uses a cohort system to track students, and has found the cumulative drop-out rate over the four years of high school to be 16% (3,475). The high school drop-out rate is even higher among African Americans (24%) and those with a Spanish surname (24%). This population of out-of-school youth are not considered homeless, but are often found engaging in the street economy along with homeless youths.

Immigrants

As an immigrant city, San Francisco is home to almost 250,000 people (34% of the total population) who were born in foreign countries (Census of Population and Housing, 1990). Seventeen percent of San Francisco immigrants arrived recently, between 1987 and 1990 (not including undocumented workers). There is no accurate estimate of undocumented immigrants, although with the recent passage of Proposition 187 many government agencies are taking an interest in maintaining these statistics. Discussions with community leaders and reviews of the literature on immigrant and refugee communities indicate that the largest numbers of undocumented immigrants to San Francisco come from China, Hong Kong, the Philippines, Mexico, and other Central American countries (Urban Institute, 1987).

Other sources indicate that a significant proportion of San Francisco youth are foreign-born. Results from the 1993 San Francisco Unified School District Youth Risk Behavior Survey (YRBS) showed that 16% of all students surveyed had lived in the United States for three years or less (San Francisco Unified School District, 1993).

The health and well-being of all immigrant peoples in California has been threatened by the statewide passage of Proposition 187. Proposition 187 requires education, health, and social service officials to verify the immigration status of the people they serve. With this information, providers

are required to report undocumented immigrants to the Immigration and Naturalization Service (INS). The unfortunate consequence of such legislation has been increased fear and hesitation among immigrants to access the educational, health, and social services they may need. However, Proposition 187 is not yet officially enforced, as it is being held up in court by an injunction. The new Welfare Bill also threatens services for both documented and undocumented immigrants.

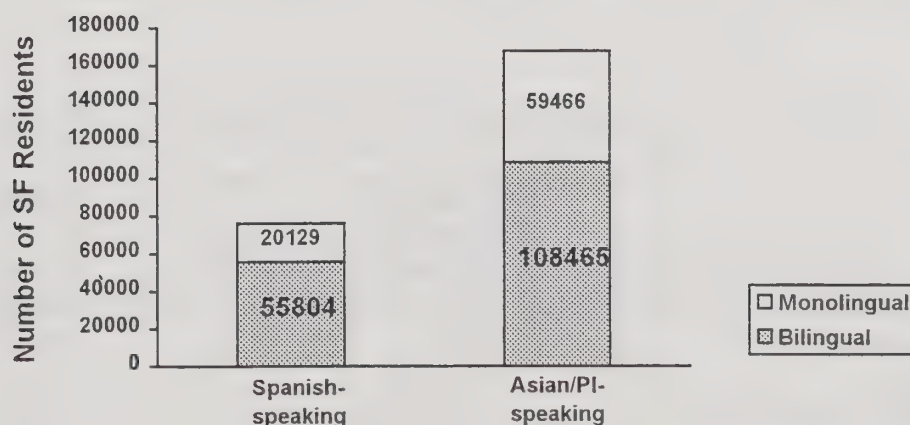
Bilingual and Non-English-Speaking Residents

Nearly half (45%) of San Franciscans speak more than one language. The languages other than English that most of these bilingual and multilingual residents speak include Chinese, Spanish, Tagalog, French, Italian, Russian, Japanese, Vietnamese, Korean, and German. Often, these are the languages of choice for speaking with one's family at home (Census of Population and Housing, 1990). Overall, the Asian or Pacific Island languages are spoken by 23% of San Francisco's population (167,931 people) and Spanish is spoken by 10% of the population (75,933 people).

Close to 12% of San Francisco residents (or 86,228 people) have limited or no English proficiency. Of these non-English-speaking monolingual residents, 66% (or 59,466 people) speak an Asian or Pacific Island language, 22% (or 20,129 people) are Spanish-speaking, and 8% (or 6,633 people) speak some other language. Currently, the proportions of people who have limited or no English proficiency increase with age category: 8% of youth between the ages of 5 and 17 years, 12% of adults between the ages of 18 and 64 years, and 19% of seniors over the age of 65 years have limited or no English proficiency (Census of Population and Housing, 1990). Other sources indicate that about 28% of San Francisco Unified School District students have limited or no English proficiency (Coleman Advocates, 1993).

Exhibit 3.7

San Francisco residents who speak Spanish or an Asian/Pacific Island language



For more information regarding language and the barriers to HIV prevention faced by non-English-speaking people and people with low literacy, please refer to the "Language Barriers and Low Literacy" co-factor (Section IX of this chapter).

Income and Poverty

Overall, San Francisco's median per capita income at the time of the 1990 census was \$19,695. In general, the median household income was \$33,414; however, by family status, the median income for nonfamily households was \$27,093, and the median income for family households was \$40,561.

Female householders live in disproportionately high rates of poverty. In San Francisco, 21% of female householders live below the national poverty level. The proportions increase substantially for women with children: 33% of female householders with related children under the age of 18 years and 45% with related children under the age of 5 years live below the poverty level. Overall, 21% of San Francisco households are headed by women (compared to 16% nationally), and 20% of all children live on AFDC (compared to 12% nationally) (Coleman Advocates, 1993).

Based on 1990 census data, 13% of San Francisco's total population is living below the poverty level (i.e., have less than \$12,674 annual income for a family of four). The situation is much worse for children under the age of 18 years: 18% of San Francisco's children were reported in the 1990 census to be living below the poverty level (Census of Population and Housing, 1990).

The unemployment rate of the city and county of San Francisco has declined in recent years, and is at the current low of 5% of the population. This is slightly higher than the rates of the neighboring counties of San Mateo and Marin (4%), identical to the rate of the other surrounding counties of Alameda and Contra Costa (5%), and lower than the rate of 7% for California overall (EDD, 1996).

The distribution of wealth in San Francisco, as measured by per capita income, is uneven along racial/ethnic lines, as illustrated in Exhibit 3.8.

Exhibit 3.8
San Francisco's Median Per Capita Income, by Race/Ethnicity.

Race/Ethnicity	Median Per Capita Income	% total
Total	\$19,695	100%
African American	\$11,829	60%
Asian / Pacific Islander	\$12,665	64%
Latino / Hispanic	\$11,400	58%
Native American / Alaska Native	\$11,485	58%
White	\$26,222	133%
Other	\$10,174	52%

Other indicators also show the uneven distribution of income. There are 15,641 residents living in 47 public housing projects in San Francisco (Comprehensive Housing Affordability Strategy, 1994). Approximately one-half (50%) of these residents are African American, 23% are Asian/Pacific Islander, 10% are Latino/Hispanic, and 12% are White. There are an additional 9,085

families and individuals on a waiting list for public housing. Currently, there are 4,026 public housing families in San Francisco with an average of 3.3 members and an income of \$9,199. Of all families in housing projects, 78% are headed by single parents (Comprehensive Housing Affordability Strategy, 1994).

Homeless Adults and Families

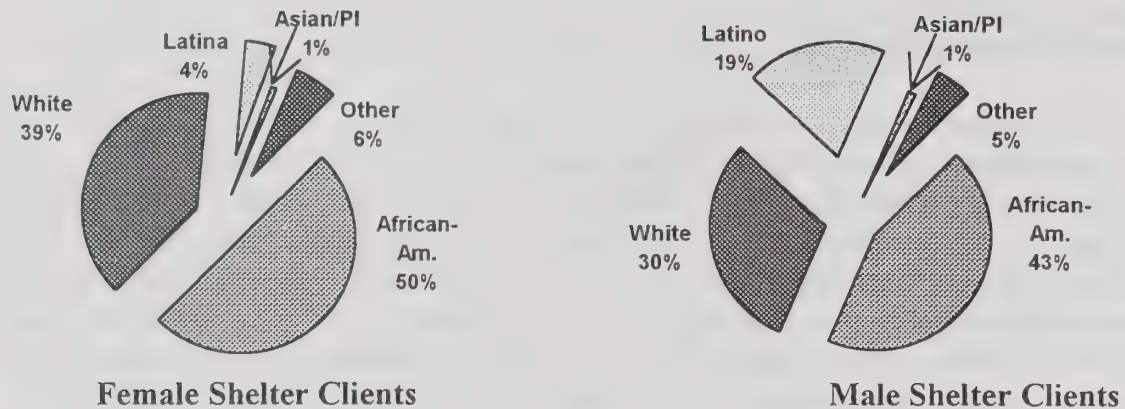
San Francisco's rate of homelessness, estimated at 769 per 100,000 people, is the second highest in the nation (Mayor's Office of Homelessness, 1996). The populations of homeless people in San Francisco are extremely diverse, and do not fall into discrete categories that can be easily defined, located, or counted. There are single male and female adults, youth, and families of all ethnicities that do not have stable living situations in San Francisco. Similarly, the condition of lacking a stable living situation also varies greatly in terms of length of time (i.e. from brief episodes to extended periods of living on the streets) and precipitating reason for not having a place to stay. Policymakers and program planners must recognize the complexities that underlie what is categorically referred to as "homelessness," if this important social issue is to be fully understood.

The 1990 census enumeration of 6,000 to 8,000 homeless people in San Francisco is considered by many experts to be inaccurate and extremely low. A more widely accepted estimate of 11,000 to 16,000 people was reported in the 1994 Comprehensive Housing Affordability Strategy. This estimate is based on the estimated number of people homeless on a given night (in shelters, transitional housing, outdoors, in vehicles, and those who are in institutions but have no home to which they can return), and takes into account people who experience an episode of homelessness during the course of a year. Homeless youth under the age of 21 years comprise approximately 20% (i.e., 2,000 youth) of the overall homeless population (Mayor's Office of Homelessness, 1996).

Data collected between April and June, 1994 from seven shelters (Multi-Service Centers North, Multi-Service Centers South, Episcopal Sanctuary, Central City Hospitality House, Salvation Army Lifeboat Lodge, Dolores Street Housing Program, and A Woman's Place) provide the following demographics. Of the 1,242 adults served, 25% were single women and 75% were single men. For both men and women, most (65%) were between the ages of 21 and 40 years. Almost half (45%) of the total sample were African American, 32% were White, 15% were Latino/Hispanic, 1% were Asian/Pacific Islander, and 6% were of other ethnicities. Exhibit 3.9 below depicts the racial/ethnic breakdown by gender. For most ethnicities, there are similar proportions of homeless men and women—except among Latinos, where the proportion of homeless men is significantly higher than the proportion of homeless women (19% compared to 4%, respectively) (Mayor's Office of Homelessness, 1996).

Exhibit 3.9

Race/Ethnicity of a Sample of San Francisco Homeless Accessing Shelter Services



Source: Mayor's Office of Homelessness, 1996.

There is no precise, unduplicated count of homeless families in San Francisco, although estimates suggest that families comprise 25%-30% of the total local homeless population. The Department of Social Services (DSS) Homeless Assistance Program, during their 1993-94 fiscal year, received 1,923 unduplicated applications from families for assistance. In order to obtain a picture of homeless families, DSS sampled 432 families who were staying at one of four family shelters (Compass Community Services, Hamilton Family Center, Rafael House, and Richmond Hills Family Center). The following presents key findings from this study.

These families reported a variety of reasons for becoming homeless: eviction (21%), relocation or resettlement (19%), inadequate income or employment (17%), and domestic violence (15%). Almost one-half (44%) of the families had a previous stay in another shelter at some point in their past and, just prior to the current shelter stay, 72% were housed in "marginal situations" or had come from another shelter. These data suggest that homelessness is an ongoing struggle for most of these families.

Most of the 432 families (64% or 276 families) were headed by a single adult. Of these, 86% were headed by single mothers and 14% were headed by single fathers. These families included 670 children, 57% of whom were under the age of 5 years old. The ethnic/racial demographics of these families are similar to those reported for male and female adults: they were 49% African American, 23% Caucasian, 16% Latino/Hispanic, 4% Asian/ Pacific Islander, 4% Multi-racial, 2% some other ethnicity, and 1% Native American. [Two-thirds (65%) of the families were receiving Aid to Families with Dependent Children (AFDC)].

For more information regarding homelessness and the barriers to HIV prevention faced by homeless populations, please refer to the "Homelessness" co-factor (Section IX of this chapter).

Incarcerated Adults

The state of California has the greatest number of inmates incarcerated in the United States, with over 100,000 presently in custody. As of July 31, 1994 there were 246 female and 2,208 male state parolees in San Francisco (California Department of Corrections). There is not a state prison in San Francisco; however, there are four San Francisco County jails. According to the San Francisco Sheriff's Department (October, 1996), the average daily census of the San Francisco jails was 2,400 inmates and the October 1996 count was 2,249, representing 157 inmates over the current San Francisco County jail bed capacity. Eighty-nine percent of inmates are male and 11% are female. The recidivism rate is predicted to be 55% (San Francisco Sheriff's Department, 1996). The population is mainly comprised of two ethnic/racial minorities—African Americans (50%) and Latino/Hispanics (27%)—but also includes 19% Whites, 2% Asian and 1% Native Americans and Samoans (San Francisco Sheriff's Department, 1996).

Summary

The diversity of San Francisco's people and neighborhoods, as described in this section, forms the City's unique character. With such cultural diversity, San Francisco is full of differing value systems, belief sets, and behavioral norms. This array of perspectives both benefits San Francisco as a multicultural epicenter and poses challenges to HIV prevention service providers, who must know their target populations and tailor interventions appropriately. The following section approaches San Francisco's diverse population from a new perspective: in terms of HIV risk behaviors. Specifically, estimated numbers within behavioral risk populations are provided.

III. CITY-WIDE POPULATION ESTIMATES

When reviewing epidemiological data for HIV prevention planning, it is useful to know the size of different populations. Census data provides information about the size of San Francisco's population by gender, age, and race/ethnicity, but provides no information about the population size by sexual orientation or HIV risk behavior groups. In the first year of planning by the San Francisco HIV Prevention Planning Council, considerable attention was paid to developing estimates of the size of sexual and drug-using population groups. These estimates became fully integrated into the Council's continued planning efforts, and the methods and estimates are repeated in this section.

A keystone of the Council's work, reflected in the priority-setting process, resource inventory, and resource allocation recommendations (all described in later chapters) is the concept of behavioral risk populations. The behavioral risk populations differ from "target groups" or "transmission categories." A behavioral risk group is a collection of people defined for the purposes of planning on the basis of their sexual and injection drug-using behaviors, but not necessarily based on the individuals' own identity or sense of commonality. A target population is a collection of people identified by a common characteristic or situation (such as homelessness, gay male identity, or crack use) which facilitates outreach and prevention services. Transmission categories are groups of persons defined by the Centers for Disease Control and Prevention (CDC) for the purpose of identifying and classifying risk exposure.

The Council established the concept of behavioral risk populations based on several principles outlined in the Year 1 Priority-Setting Criteria for priority target groups:

Principle: There is only one factor for determining which populations need focused prevention efforts: namely, a significant risk of contracting HIV. Risk of contracting HIV is caused by practicing certain identifiable behaviors.

In order to base priority-setting practices on these behavioral risk groups, estimates of the size of the groups were needed. Two sources of information were combined to form the estimates: U.S. census data, and estimates of the size of transmission groups, based on various published and unpublished reports and studies conducted in San Francisco.

The majority of these reports utilize commonly reported transmission groups, such as gay/bisexual men, injection drug users (IDUs), and heterosexuals. For the purposes of prevention planning, however, these reports needed to be transformed into HPPC-defined behavioral risk groups. Therefore, traditional risk groups were re-configured to reflect sexual and blood exposure to HIV. Exhibit 3.10 below shows the traditional transmission categories, and the behavioral risk populations adopted by the HPPC.

Exhibit 3.10
Translations Between Risk Groups and Behavioral Risk Populations

Traditional Risk Groups	HPPC Behavioral Risk Populations	Abbreviation
Gay/Bisexual Men	→ Males Who Have Sex with Males	MSM
	→ Males Who Have Sex with Males and Females	MSM/F
Gay/Bisexual Men - IDUs	→ Males Who Have Sex with Males - IDUs	MSM-IDU
	→ Males Who Have Sex with Males and Females - IDUs	MSM/F-IDU
Other IDUs	→ Males Who Have Sex with Females - IDUs	MSF-IDU
	→ Females Who Have Sex with Males - IDUs	FSM-IDU
	→ Females Who Have Sex with Males and Females - IDUs	FSF/M-IDU
	→ Females Who Have Sex with Females - IDUs	FSF-IDU
Other Adults	→ Males Who Have Sex with Females	MSF
	→ Females Who Have Sex with Females	FSF
	→ Females Who Have Sex with Males and Females	FSF/M
	→ Females Who Have Sex with Males	FSM

Within the behavioral risk populations, transgender male-to-female (pre-operative) and female-to-male (post-operative) are included as male. Transgender female-to-male (pre-operative) and male-to-female (post-operative) are included as female. Please see Attachment 3 to Chapter 5 for further information.

Population Size by Ethnicity

The development of estimates of risk behavior population size was based on estimates from the 1990 Census, Population and Housing Statistics. The city-wide 1990 census of adults and adolescents 13 years and older is 638,893. Since the census does not report “Latino/ Hispanic” as a separate racial group, the size of the Latino/Hispanic population was derived by separating those persons in all racial groups who report that they are of “Hispanic Origin.” Exhibit 3.11 displays the census data.

Exhibit 3.11
Size of Population by Race/Ethnicity

Hispanic Origin	African American	Asian/Pac. Islander	Native American	White	Other Race
Total	64,267	179,731	2,929	356,845	35,121
Yes	1,606	3,055	642	45,320	35,121
No	62,661	176,676	2,287	311,525	**

** non-Hispanic “other” race were excluded from the City-Wide population estimates.

The reported population estimates of African Americans, Asian/Pacific Islanders, Native Americans, and Whites are non-Hispanic, that is, those who did not report Hispanic origin. Latino/Hispanic ethnicity is then reported as a racial category. However, the 1990 census probably underestimates particular population groups (e.g., homeless adults and youth, immigrants, and some non-White populations).

Transmission Group Estimates

In 1992 an important series of meetings, dubbed the Consensus Meetings, took place among researchers. The purpose of these meetings was to bring together researchers to discuss published and in-progress research studies and develop the best possible estimates of both the size of risk populations and their HIV prevalence. The meeting’s report provided population estimates for traditional risk groups by race/ethnicity. These estimates are shown in Exhibit 3.12, below.

The 1992 Consensus Report risk group population estimates were based on a composite of distributions from several studies and reports. The composite estimate for gay and bisexual men used the following sources: 1) reported AIDS cases in 1992; 2) a random digit-dial survey of gay and bisexual men conducted by Communications Technologies (1990); 3) the racial and ethnic distributions from the Young Men’s Survey (1992/93); 4) an unlinked seroprevalence survey at a STD Clinic (City Clinic 1991); and 5) the 1990 census.

Similarly, to estimate the racial/ethnic distribution of IDUs, the Consensus Report used a second composite from the following sources: 1) reported AIDS cases among IDUs in 1992; 2) population-based household surveys of African Americans (Polaris Research & Development, 1989), Latinos (Fairbank, Bregman, and Maullin, 1989), Filipinos (Asian-American Health Forum/Filipino Task Force on AIDS, 1990), Chinese (Asian American Recovery Services, 1990), Japanese (Asian-American Recovery Services, 1990), and Southeast Asians (Center for Southeast Asian Refugee Resettlement, 1991); 3) unduplicated counts of clients in drug treatment (Community Substance Abuse Services, SFDPH, 1990-91); 4) unlinked HIV seroprevalence surveys at

methadone clinics in San Francisco (1989-92); 5) street-based surveys of IDUs (Urban Health Study, 1991-92); and 6) the 1990 census.

Exhibit 3.12
Population Estimates of Risk Groups by Race/Ethnicity, 1993 Consensus Report.

	African American	Asian/Pac. Islander	Latino/ Hispanic	Native American	White
All Adults (census)	62,661	176,676	85,744	2,287	311,525
Gay/Bisexual Men					
Non-IDU	5,506	5,792	7,802	322	35,578
IDU	300	316	426	18	1,941
Sub-Total	5,806	6,107	8,228	340	37,519
IDUs					
Heterosexual Men	2,961	472	977	77	3,979
Women	1,568	250	517	41	2,106
Sub-Total	4,529	722	1,494	118	6,085
Remaining Adults: Non-IDU lesbian, bisexual and heterosexual women and heterosexual men	52,326	169,847	76,022	1,829	267,921

From these composite reports, the population estimates for gay and bisexual men are 55,000 non-IDUs and 3,000 IDUs. For non-gay male IDUs, the estimated size is 8,500 heterosexual men and 4,500 heterosexual women.

Estimates of the number of other adults and adolescents (heterosexual women and men) are calculated by subtracting the population size estimates for gay and bisexual men and IDUs from the total number of adults and adolescents in San Francisco.

No reports are available which estimate the number of lesbian and bisexual women. Therefore, the widely circulated but unsubstantiated estimate of 10% was used for the adult female population (or approximately 31,500 women) that has sex with women.

The following assumptions were used to obtain the size of bisexual populations (MSM/F and FSF/M). From the Young Men's Survey, 25% of MSM had sex with a woman during the previous six months. Therefore, the population sizes of MSM/F and MSM/F-IDU are assumed to be a quarter of the MSM and MSM-IDU populations. From the 1992 Women's Survey, 52% of FSF also had sex with a man during the previous three years. Therefore, it is assumed that 52% of FSF are FSM/F. Also from the 1992 Women's Survey, among FSF, 3.8% had injected drugs during the previous four years. Therefore it is estimated that 3.8% of FSF and FSM/F were injection drug users. Unfortunately, there are no San Francisco studies that show the number of heterosexually-identified men or women who have sex with a same-sex partner.

Since there are no adequate estimates of "risk" by age or age group, this methodology assumes a standard age structure. These estimates use the city-wide age distribution as the standard.

Exhibits 3.13 through 3.16 present the estimates derived from the above described methodology.

Exhibit 3.13
Population Estimates: Age and Ethnicity by Gender

All Adults and Adolescents Over 13 Years

	Females	Males	Total
Total:	319,849	319,044	638,893
Age Group			
13-26 years	67,168	67,957	135,125
27-29 years	23,989	24,566	48,555
30-34 years	35,604	42,355	77,959
35-39 years	32,015	37,405	69,420
40+ years	161,073	146,761	307,834
Total:	319,849	319,044	638,893
Race/Ethnicity			
African American (Non-Hispanic)	31,843	30,818	62,661
Asian/Pacific Isl. (Non-Hispanic)	93,128	83,548	176,676
Latino/Hispanic	41,766	43,978	85,744
Native American (Non-Hispanic)	1,097	1,190	2,287
White/Caucasian (Non-Hispanic)	152,015	159,510	311,525
Total:	319,849	319,044	638,893

NOTE: The sum of all categories may not add to the total, due to rounding.

Exhibit 3.14
Population Estimates: Behavioral Risk Populations

All Adults and Adolescents 13 Years and Older

	Estimated Population Size	% of SF Population
Total:	638,893	100.00%
Behavioral Risk Populations:		
Females who Have. . .		
. . .Sex with Females	14,550	2.28%
. . .Sex with Females - IDU	575	0.09%
. . .Sex with Females and Males	15,750	2.47%
. . .Sex with Females and Males - IDU	625	0.10%
. . .Sex with Males	285,049	44.62%
. . .Sex with Males - IDU	3,300	0.52%
Sub-Total:	319,849	50.06%
Males who Have. . .		
. . .Sex with Females	252,544	39.53%
. . .Sex with Females - IDU	8,500	1.33%
. . .Sex with Males and Females	13,750	2.15%
. . .Sex with Males and Females - IDU	750	0.12%
. . .Sex with Males	41,250	6.46%
. . .Sex with Males - IDU	2,250	0.35%
Sub-Total:	319,044	49.94%

NOTE: The sum of all categories may not add to the total, due to rounding.

Exhibit 3.15
Population Estimates: Behavioral Risk Populations by Age

All Adults and Adolescents 13 Years and Older

	13-26 years	27-29 years	30-34 years	35-39 years	40+ years	Total
Total:	135,125	48,555	78,036	69,391	307,787	638,893

Behavioral Risk Populations:

Females who Have. . .

. . .Sex w/ Females	3,056	1,091	1,623	1,456	7,324	14,550
. . .Sex w/ Females - IDU	121	43	64	58	289	575
. . .Sex w/ Females & Males	3,308	1,181	1,757	1,576	7,928	15,750
. . .Sex w/ Females-IDU & Males	131	47	70	62	315	625
. . .Sex with Males	59,860	21,379	31,794	28,533	143,483	285,049
. . .Sex with Males - IDU	693	248	368	330	1,662	3,300
Sub-Total:	67,169	23,989	35,676	32,015	161,001	319,849

Males who Have. . .

. . .Sex w/ Females	53,792	19,446	33,530	29,585	116,190	252,544
. . .Sex w/ Females - IDU	1,811	655	1,128	996	3,911	8,500
. . .Sex w/ Males & Females	2,929	1,059	1,826	1,611	6,326	13,750
. . .Sex w/ Males & Females-IDU	160	58	100	88	345	750
. . .Sex with Males	8,786	3,176	5,477	4,832	18,979	41,250
. . .Sex with Males - IDU	479	173	299	264	1,035	2,250
Sub-Total:	67,956	24,566	42,360	37,376	146,786	319,044

NOTE: The sum of all categories may not add to the total, due to rounding.

Exhibit 3.16
Population Estimates: Behavioral Risk Populations by Ethnicity

All Adults and Adolescents 13 Years and Older

	African American	Asian/ Pacific Isl.	Latino/ Hispanic	Native American	White
Total:	62,661	176,676	85,744	2,287	311,525

Behavioral Risk Populations:

Females who Have. . .

. . .Sex w/ Females	1,449	4,236	1,900	50	6,915
. . .Sex w/ Females - IDU	199	29	75	5	273
. . .Sex w/ Females & Males	1,568	4,586	2,056	54	7,486
. . .Sex w/ Females-IDU & Males	217	34	82	5	297
. . .Sex with Males	27,258	84,056	37,294	952	135,508
. . .Sex with Males - IDU	1,152	187	360	30	1,535
Sub-Total:	31,843	93,128	41,766	1,097	152,015

Males who Have. . .

. . .Sex w/ Females	22,051	76,968	34,774	774	118,013
. . .Sex w/ Females- IDU	2,961	472	977	77	3,979
. . .Sex w/ Males & Females	1,376	1,448	1,950	80	8,894
. . .Sex w/ Males & Females-IDU	75	79	106	5	485
. . .Sex with Males	4,130	4,344	5,852	241	26,683
. . .Sex with Males - IDU	225	237	319	13	1,456
Sub-Total:	30,818	83,548	43,978	1,190	159,510

NOTE: The sum of all categories may not add to the total, due to rounding.

IV. AIDS IN SAN FRANCISCO

This section presents information about the number and distribution of AIDS cases in San Francisco. First, information about cumulative AIDS cases is presented—reported cases of AIDS from the beginning of the epidemic (July 1981) through June 30, 1996. Then, information about recent AIDS cases is presented—diagnosed cases of AIDS from 1991 through 1995 (reported through May 1996).

Although AIDS case data is a useful source of information, there are three primary limitations. First, the average time from infection with HIV to the development of an AIDS defining condition is approximately ten years. Because of this long delay, AIDS case data provide a profile of populations infected approximately ten years ago, rather than populations currently being infected. Second, the proportion of AIDS cases in some populations increased after 1993 when the AIDS case definition was changed to include more illnesses experienced by women with HIV, people with HIV and tuberculosis, and all HIV-infected individuals with CD4 counts below 200 cells/mm³. Although the AIDS case definition change provided a more accurate picture of the HIV/AIDS epidemic, it makes it seem that there was a significant increase in cases reported in 1993. The third limitation involves the potential underreporting of certain populations, such as men who have sex with men but self-identify as heterosexual. Despite these limitations, AIDS case data is the most comprehensive source of information—in that all, or close to all, cases are reported and therefore included in the description.

Cumulative AIDS cases

There have been a total of 23,176 persons diagnosed with AIDS in San Francisco from July 1981 through June 30, 1996.¹ One-quarter of all persons diagnosed with AIDS in California (93,860) have been San Francisco cases, and five percent of all persons diagnosed in the U.S. (513,486) have been in San Francisco. Of all persons diagnosed with AIDS in San Francisco, 31%, or 7,104, are still living.

Three percent (3%) of the total number of AIDS cases in the City have been among women and girls, and 97% have been among men and boys. The relatively small number of cases among females has implications for other sections in this epidemiological profile. It will often not be possible to reliably present information about AIDS or HIV infections for subgroups of women.

¹ This number includes San Francisco residents who were diagnosed in San Francisco, San Francisco residents diagnosed in other jurisdictions, and persons diagnosed in San Francisco who resided in other jurisdictions at the time of their AIDS diagnosis.

Exhibit 3.17 shows the number of cumulative AIDS cases by ethnicity. This exhibit shows that over three-quarters (76.% or 17,652 persons) of all San Francisco AIDS diagnoses have been among Whites, and almost one-quarter (24% or 5,524 persons) among people of color, including 11% (2,536) among African Americans, 10% (2,310) among Latina/os, 3% among Asians and Pacific Islanders (580), and 0.4% (98) among Native Americans.

Of the 580 Asians/Pacific Islanders diagnosed with AIDS, 36% (212 persons) are Filipino, 27% (157) are Chinese, 14% (80) are Japanese, 7% (43) are Pacific Islander, 7 (40) are Southeast Asian, 2% (9) are Korean, and 7% (39) are of another ethnicity.

Exhibit 3.17
Cumulative AIDS Cases by Ethnicity 1981 - 1996

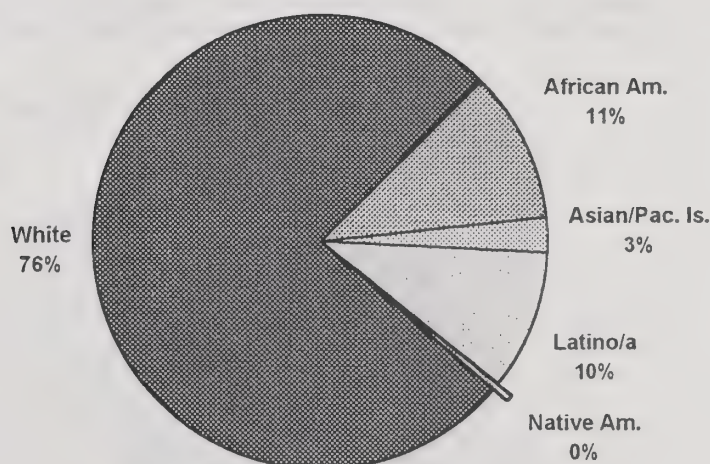
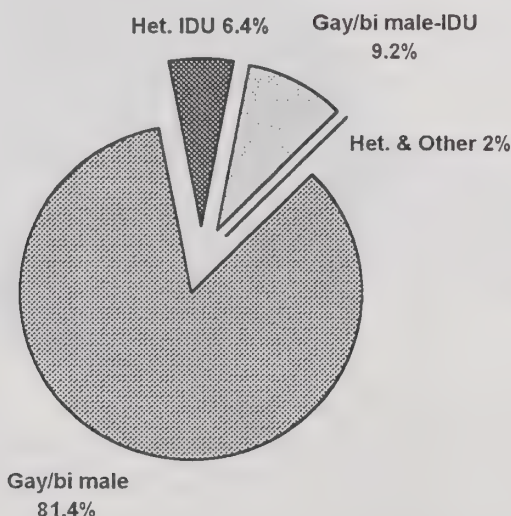


Exhibit 3.18 shows the distribution of AIDS diagnoses by CDC-defined risk group. (The next section on recent AIDS cases will present information by HPPC-defined behavioral risk group.) This exhibit shows that 81% of all persons diagnosed with AIDS in San Francisco have been gay or bisexual males². Additionally, 9% have been gay or bisexual male injection drug users. Injection drug users have comprised 16% of all cases in the City—6% heterosexual IDUs, 9% gay/bisexual male IDUs, and 0.1% lesbian/bisexual female IDUs.

One percent of cumulative cases of AIDS have been among persons classified in the heterosexual contact category. By definition these are persons who are not gay/bisexual males and not injection drug users. They are persons whose only known risk factor is sexual contact with a member of the opposite sex.

All other transmission categories comprise two percent of cumulative cases of AIDS, including 0.8% transfusion recipients, 0.2% persons with hemophilia or other coagulation disorders, 0.2% children under the age of 12 years (pediatric)³, and 0.7% other⁴.

Exhibit 3.18
Cumulative AIDS Cases in San Francisco 1981 - 1996



² Persons with more than one risk factor (other than the combinations listed on the graphs) are tabulated only in the most likely transmission category.

³ Includes children who have hemophilia or other coagulation disorder, have received a blood transfusion, or who have acquired their infection from an infected mother during the perinatal period.

⁴ Includes persons for whom risk information is incomplete (due to death, refusal to be interviewed, or loss to follow-up), cases still under investigation, or interviewed patients who offered no plausible risk for HIV.

Exhibit 3.19 shows the distribution of cumulative AIDS cases among women and girls. This exhibit shows that over half of AIDS diagnoses (52% or 378) have been among heterosexual injection drug users. An additional 24 women (3%) have been lesbian or bisexual IDUs. A total of 203 women (28%) are in the heterosexual contact transmission category. It should be noted that this category does not define *sexual orientation*, and some persons in this category may *self-identify* as bisexual or lesbian. Conversely, some persons in the “lesbian or bisexual” IDU category may self-identify as heterosexual or straight. Eighty women, (11%), contracted HIV through a blood transfusion, one woman (0.1%) contracted the virus from blood products associated with coagulation disorders, and 19 women, or 3% are classified as none/other. Additionally, there have been 19 girls under age 13 (3% of all female AIDS cases) diagnosed with AIDS.

Exhibit 3.19
Cumulative Cases of AIDS among Females 1981 - 1996

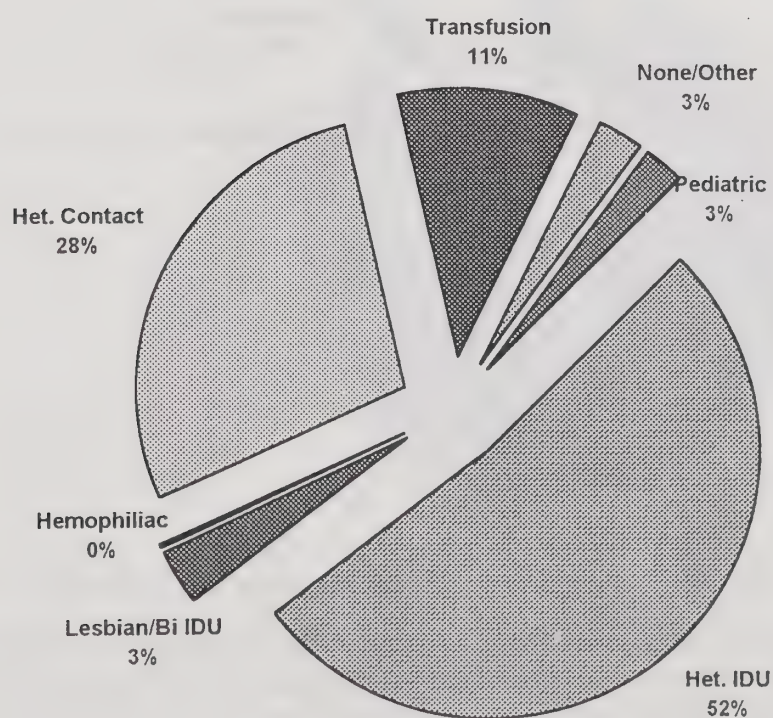
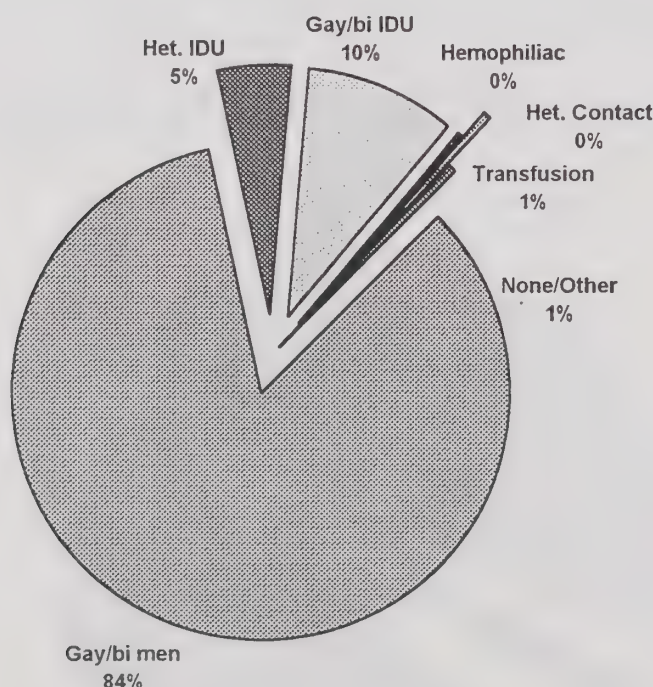


Exhibit 3.20 shows the distribution of AIDS cases among men and boys. Since males constitute 97% of cumulative cases of AIDS, the distribution of cases among males is very similar to the distribution of total cases. Exhibit 2.21 shows that 84% of cases among males (18,865 males) have been among gay and bisexual men. Additionally, 10% (or 2,132) have been among gay/bisexual IDUs, and 5% among heterosexual IDUs. All other transmission categories constitute less than one percent of male cases, including 0.2% (37) persons with hemophilia or other coagulation disorders, 0.2% (46) persons in the heterosexual contact category, 0.5% (113) persons who contracted HIV from transfusion, and 0.6% (143) in the none/other category. There have also been 20 boys under age 12, or 0.1%, who have been diagnosed with AIDS.

Exhibit 3.20
Cumulative Cases among Males 1981 - 1996



Recent AIDS Cases

The use of CDC-defined transmission categories is mandatory for the AIDS Office AIDS Case Registry. However, the HPPC determined that these categories are not the best for local planning purposes. During the first-year planning process, the San Francisco HPPC urged the AIDS Office Epidemiology and Surveillance Branch to analyze recent AIDS cases in terms of behavioral risk populations, rather than the traditional CDC-defined transmission risk categories.

In this third year of planning, (1996) the AIDS Office again analyzed recent AIDS cases into the behavioral risk populations. Information about AIDS cases diagnosed between 1991 and 1995, reported through May 31, 1996 for the City and County of San Francisco, is presented here. All cases due to sexual transmission and/or injection drug use were re-classified into one of the twelve HPPC-defined behavioral risk populations, and cases are tabulated by race/ethnicity and age at time of diagnosis. AIDS cases attributed to hemophilia and transfusions, and cases in the "none/other" categories and pediatric cases (0-12 yrs) are not included in this analysis. The five-year period (1991-1995) was chosen to capture the most recent diagnoses while providing a sufficient sample size within each behavioral risk population. Presenting recent AIDS cases enables readers to gain a better understanding of the epidemic as it stands today, rather than reflecting the decade and a half since its beginning.

Distribution of AIDS

Between 1991 and 1995, a total of 11,565 cases of AIDS were diagnosed in San Francisco due to sexual transmission and/or injection drug use. Exhibit 3.21 shows that, among persons recently diagnosed with AIDS, men still far outnumber women. Four percent of recent AIDS diagnoses have been among women, and 96% among men. The relatively small number of cases among women limits the reliability with which information about subgroups of women can be discussed.

Exhibit 3.21
Recent AIDS Cases by Gender 1991-1995

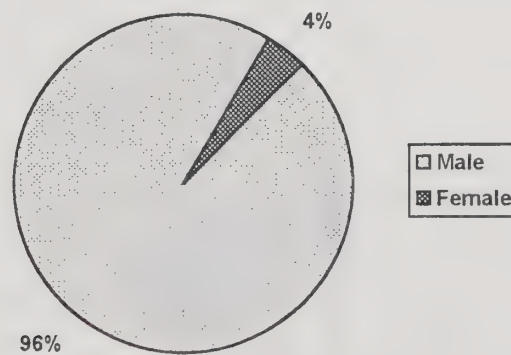


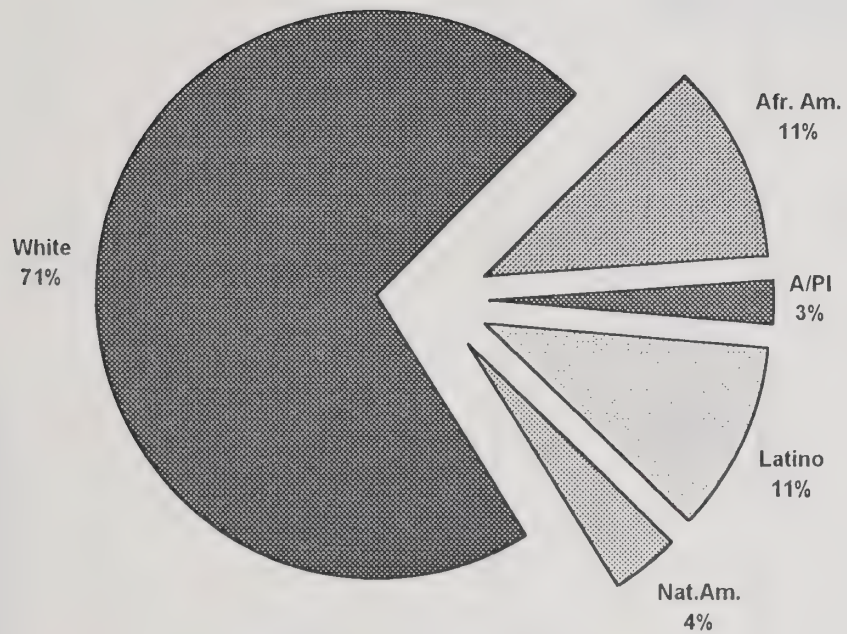
Exhibit 3.22 shows the distribution of recent AIDS cases by ethnicity for men and women. Of the 11,106 recent AIDS cases among men, over one-quarter have been among people of color. Approximately equal proportions have been among Latinos and African American men - 11% and 12% respectively. Three percent have been among Asians and Pacific Islanders, and 0.5% among Native Americans. Almost three-quarters (74%) have been among White males.

Almost two-thirds (64%) of the female AIDS cases are among women of color. African American women recently diagnosed with AIDS constitute 46% of the female AIDS cases, Latinas

account for 12%, Asian/Pacific Islander women account for 4% and Native American women account for 2%. Whites account for 36% of recent AIDS cases among women.

Exhibit 3.22
Recent AIDS Cases by Ethnicity
1991-1995

Males



Females

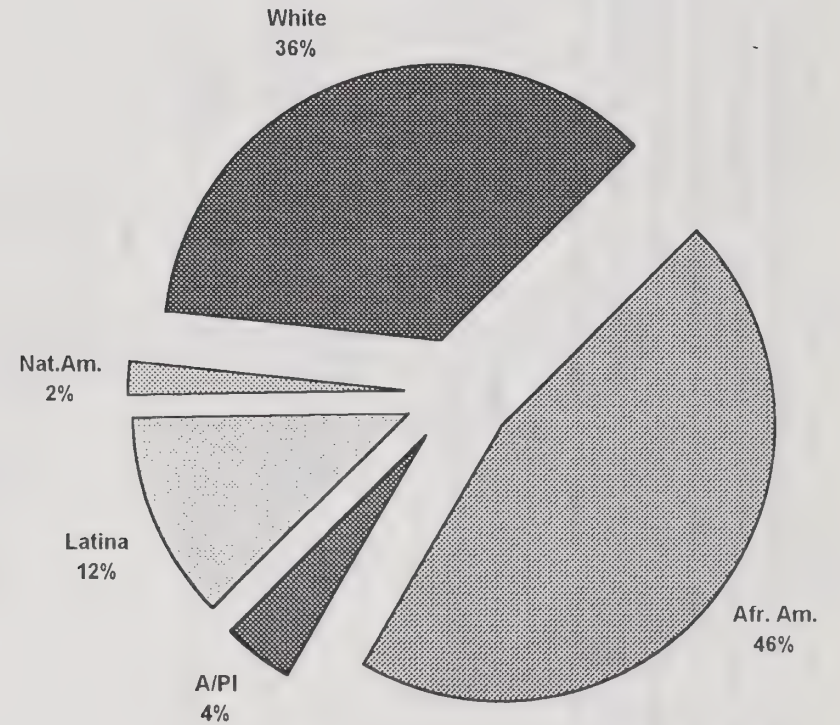


Exhibit 3.23 shows the age distribution of recent AIDS cases for men and women. This exhibit shows that men diagnosed with AIDS tend to be slightly older than women. There is a higher proportion of women in the 13-36-year-old group and a lower proportion in the over 40 group. Among men, 4% of recent diagnoses have been among adolescents and young adults; 7% have been among persons age 27-29 years, 21% among those in their early thirties, 24% among those in their late thirties, and 44% among men age 40 and older.

Among women, 7% of recent diagnoses have been among adolescents and young adults. Eleven percent (11%) have been among women age 27-29 years, 24% among women age 30-34 years, 21% among those age 35-39 years, and 37% among women age forty and older.

Exhibit 3.23
Recent AIDS Cases by Age Group, 1991-1995

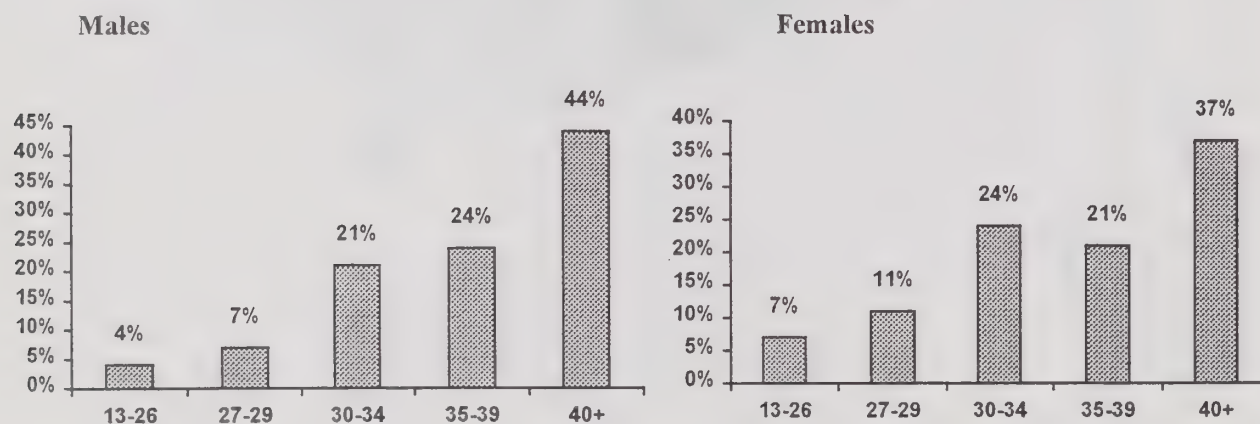


Exhibit 3.24 shows the number of recent adult/adolescent AIDS cases among men by behavioral risk population. The highest proportion of AIDS cases are among males who have sex with males (MSM)—79% of recent male cases. Additionally, 7% of recent AIDS cases are among males who have sex with males and inject drugs (MSM-IDU). Only slightly smaller is the percentage of males with AIDS who have sex with females and inject drugs (MSF-IDU). Males who have sex with males and females (MSM/F) comprise 5% of recent AIDS cases among men. Males who have sex with males and females and inject drugs (MSM/F-IDU) comprise 2% of recent cases. The lower percentage of recent AIDS cases found among MSM/F-IDU compared to MSM/F may be due to the smaller size of that population rather than any lower risk of the activities. Finally, non-IDU males who have sex with females (MSF) comprise 1.0% of recent AIDS cases.

Exhibit 3.24
Recent AIDS Cases by Behavior Risk Group—Adolescent/Adult Males
1991-1995

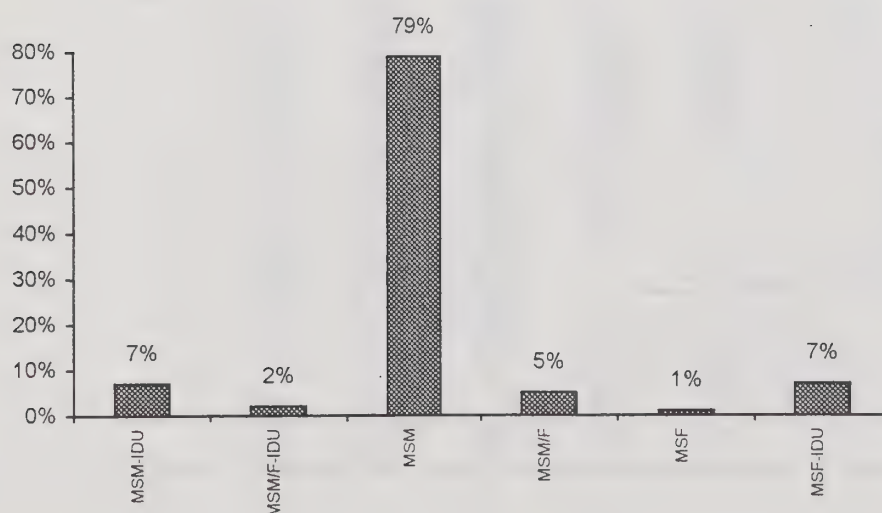


Exhibit 3.25 shows the proportion of recent AIDS diagnoses among adult and adolescent women. Sixty-one percent (61%) of recent AIDS cases among women have been among females who have sex with males and inject drugs (FSM-IDU). Over one-third (35%) of women recently diagnosed with AIDS are females who have sex with males (FSM). A very small proportion of women recently diagnosed with AIDS are females who have sex with females and males and inject drugs (FSF/M-IDU)—3%. Even fewer are females who have sex with females only and inject drugs (FSF-IDU)—1%, and non-IDU females who have sex with females and males (FSF/M)—0.7%. No cases of AIDS were found among non-IDU females who have sex only with females (FSF) in the time period examined.

Exhibit 3.25
Recent AIDS Cases by Behavioral Risk Groups—Females
1991-1995

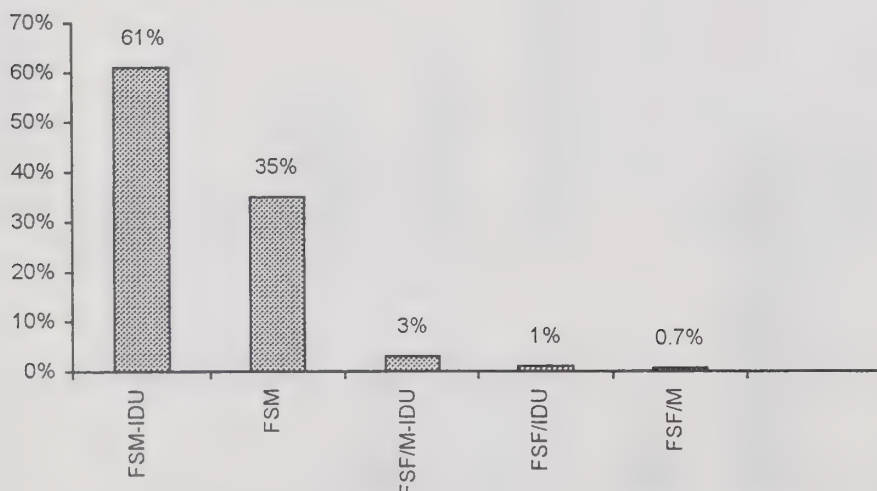


Exhibit 3.26 shows the percentage of recent AIDS cases for each ethnic group within male behavioral risk populations. Please note that the size of the behavior risk populations varies tremendously, as shown in Exhibit 3.23. The bars are of equal height to better compare ethnic percentage composition across behavior risk populations. Exhibit 3.26 shows that there is a substantially higher percentage of African Americans in the MSF (38%) and MSF-IDU (47%) behavioral risk groups than there are in other risk groups. Only 7% of the MSM risk population is African American. The MSF and MSM/F risk groups have a relatively high proportion of Latinos, 30% and 20% respectively. Two-thirds to three-quarters of recently diagnosed AIDS cases among MSM (79%), MSM-IDU (74%), and MSM/F-IDU (67%) have been among Whites. While recent cases of AIDS among Asians/Pacific Islanders and Native Americans do not comprise a majority in any behavioral risk group, male Asian/Pacific Islanders are more likely to fall within the MSF (7%) group and MSM/F (5%), while Native Americans are more likely to be in the MSM/F-IDU (2%) and MSM-IDU (1%) behavioral risk groups.

Exhibit 3.26
Recent AIDS Cases by Behavioral Risk Group and Ethnicity—Males

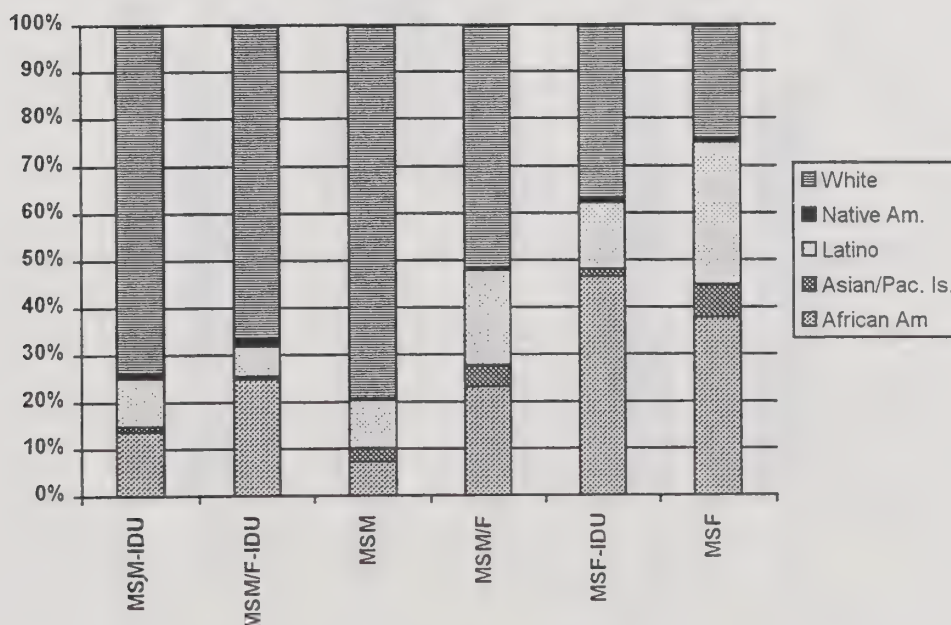
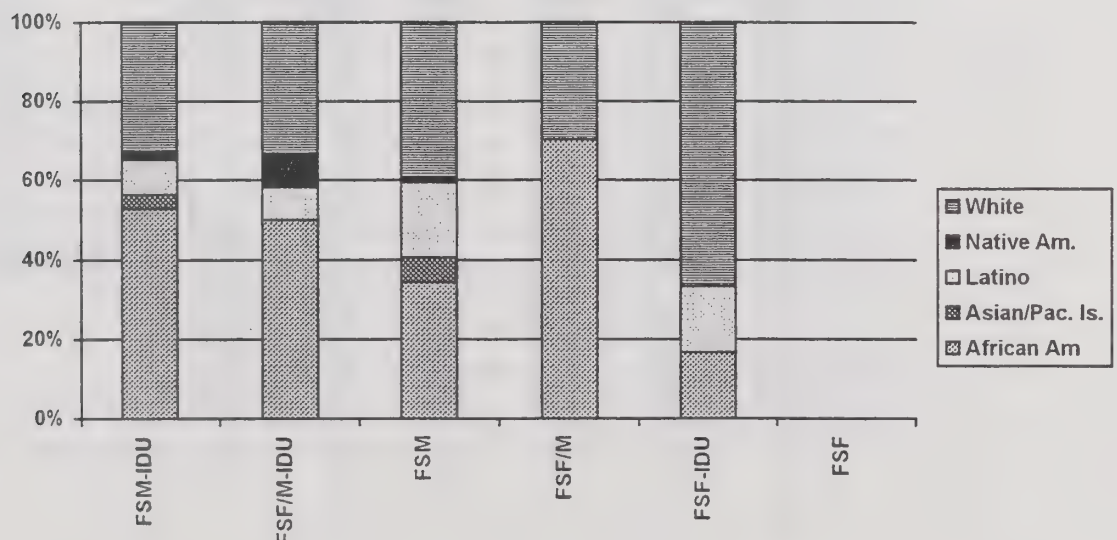


Exhibit 3.27 shows the percentage of recent AIDS cases for each ethnic group within female behavior risk populations. As with the male behavior risk groups, the size of the female behavior risk groups vary considerably, as shown in Exhibit 3.23. There have been no recent AIDS cases among females who have sex with females (FSF), and few cases (less than 20 collectively) among FSF/M-IDU, FSF/M, and FSF-IDU risk populations. Due to these small numbers, caution should be used when interpreting this exhibit.

There are two female behavioral risk groups with more than a handful of recent diagnoses, FSM-IDU (278 women) and FSM (160 women). Among FSM-IDU, African American women constitute a clear majority of cases, at 53%, while White women constitute 33%, Latinas 9%, and Asian/Pacific Islanders and Native Americans 6%. Among FSM, the number African American and White women is approximately equal; African Americans comprise 34% and Whites 39% of the FSM risk group, Latinas 19%, Asian/Pacific Islanders 6%, and Native Americans 1%.

Exhibit 3.27
Recent AIDS Cases by Behavioral Risk Group and Ethnicity—Females



Rates per 100,000 Population

Rates per 100,000 population is a useful method for describing the impact of AIDS on communities of different sizes. In San Francisco, Whites and Asians/Pacific Islanders are sizable populations (over 150,000 each), while Native Americans form a small population (under 3,000). Dividing the number of AIDS cases by the population size (and multiplying by 100,000 to get a larger number), gives the rate per 100,000, and these rates can be used to compare the impact of AIDS across groups. Rates by gender, ethnicity, age group, and behavioral risk group are presented here. Exhibit 3.28 shows that just as the number of cumulative and recent AIDS cases is much higher among men than among women, so is the rate per 100,000. Among men, the recently diagnosed AIDS case rate per 100,000 is 3,481, compared to 144 per 100,000 among women.

Exhibit 3.28
Recent AIDS Case Rates per 100,000 by Gender, 1991-1995

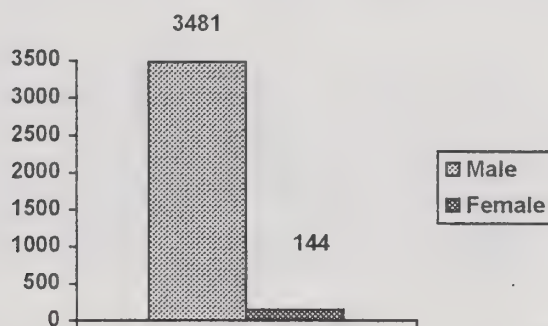


Exhibit 3.29 shows recent AIDS case rates for males by ethnicity. This exhibit shows that White, Native American and African American communities in the City have been heavily impacted by the epidemic. While the Native American community in San Francisco is quite small, the rate per 100,000 is the second highest of all ethnic groups.

Exhibit 3.29
Recent AIDS Case Rates per 100,000 by Ethnicity—Males, 1991-1995

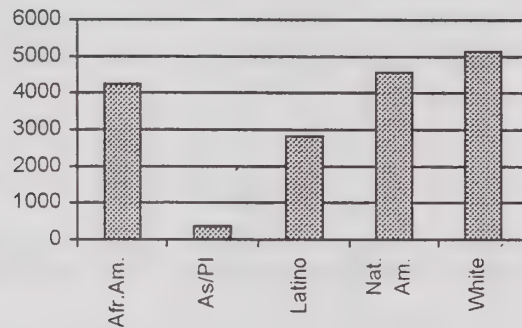


Exhibit 3.30 shows recent AIDS case rates per 100,000 among women by ethnicity. As noted above, these rates are considerably lower than rates among males. Among women, the highest rates are found among Native American and African American women.

Exhibit 3.30
Recent AIDS Case Rates per 100,000 By Ethnicity—Females, 1991-1995

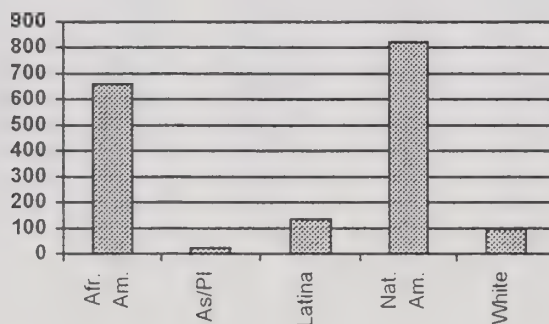


Exhibit 3.31 shows rates per 100,000 population of recent AIDS cases for adult/adolescent males by behavioral risk group. Unlike the *number* of recent AIDS cases, which is highest among MSM and substantially lower among MSM-IDU, the *rate* of AIDS is significantly higher among MSM-IDU. The rates of recent AIDS cases among males are very high among MSM-IDU at 35,600; MSM/F-IDU; at 25,067; and MSM; at 21,154. The rate per 100,000 MSF-IDU is 8,824; the rate among MSM/F is 3,818; and the rate among MSF is substantially lower, at 46 per 100,000.

Exhibit 3.31
Recent AIDS Case Rates per 100,000 Population
by Behavioral Risk Population - Males

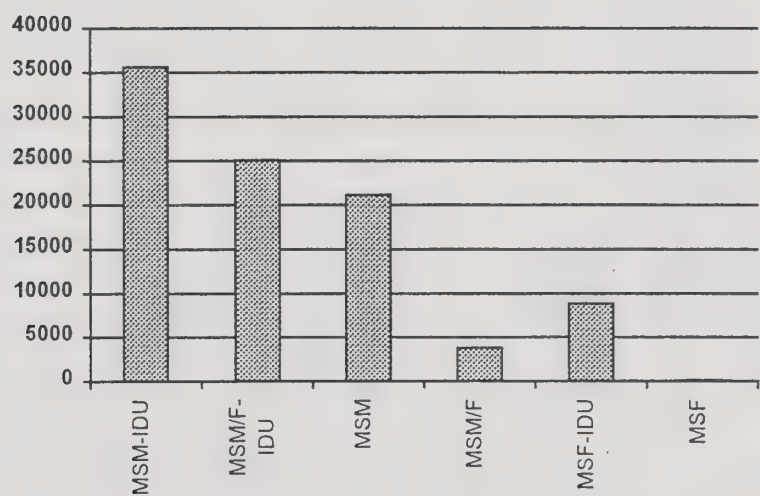
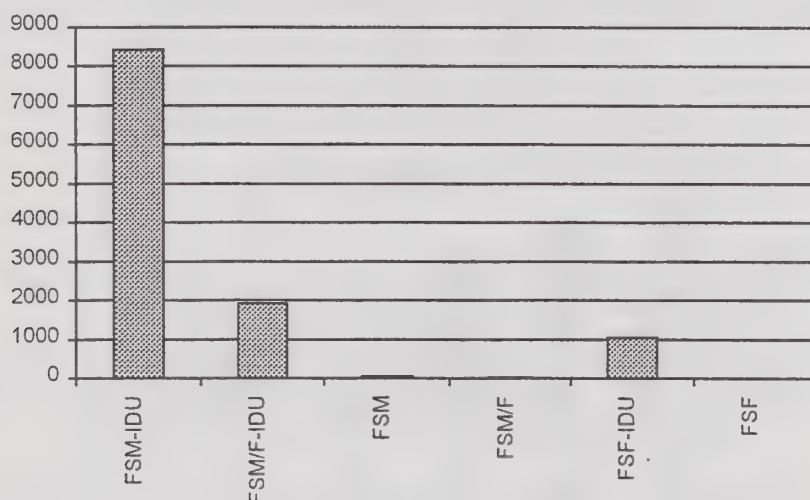


Exhibit 3.32 shows rates per 100,000 population of recent AIDS cases for adult/adolescent females. Among women, the highest rate of AIDS per 100,000 is found among FSM-IDU: 8,424. The rate among FSF/M-IDU is 1,920, and the rate among FSF-IDU is 1,043. Rates for other female behavioral risk groups are much lower. FSM have an AIDS case rate of 56 per 100,000; FSF/M have a rate of 19 per 100,000, and among FSF, there have been no diagnosed AIDS cases in the past five years.

Exhibit 3.32
Recent AIDS Case Rates per 100,000 Population
by Behavioral Risk Population—Females



Summary of Recent AIDS Cases

Exhibit 3.33 shows recent AIDS cases (1991 - 1995), AIDS case rates per 100,000, and estimates of population size by behavioral risk group. For each behavioral risk group, this information is displayed by ethnicity and age. The majority of recently diagnosed AIDS cases in San Francisco continue to be found among males who have sex with males (75%). Ten percent of the recent MSM cases were among males 29 years of age or younger who probably became infected in their teens. Sixty percent of the recent female AIDS cases are found among females who have sex with males and inject drugs, with African American females being disproportionately affected. While information about recent AIDS cases and rates per 100,000 population decrease the limitations of information from the AIDS Case Registry, these data cannot overcome the limitation that a new diagnosis represents an infection contracted eight to ten years previous. Prevalence data, on the other hand, provides information about recent infections, and is therefore very important to prevention planning. The next two sections present information about HIV prevalence.

Exhibit 3.33
Adult/Adolescent AIDS Cases (>=13 yrs) Diagnosed 1991-1995,
Reported through 5/31/96

Males Who Have Sex With Males and Inject Drugs

	No. of Cases	Rate per 100,000	% of Total Cases	Population
Ethnicity				
White	591	40,591	73.8%	1,456
Black	110	48,889	13.7%	225
Hispanic	82	25,705	10.2%	319
Asian*	9	3,797	1.1%	237
Native American	9	69,231	1.1%	13
Total	801		100.0%	
*Asian Ethnicity				
Chinese				
Filipino	4		0.5%	
Hawaiian/PI	1		0.1%	
Japanese	2		0.2%	
Korean				
SE Asian				
Other	2		0.2%	
Total	9		1.1%	
Age				
13-26	47	9,812	5.9%	479
27-29	89	51,445	11.1%	173
30-34	220	73,579	27.5%	299
35-39	205	77,652	25.6%	264
40+	240	23,188	30.0%	1,035
Total	801	35,600	100.0%	2,250

Males Who Have Sex With Females & Males and Inject Drugs

	No. of Cases	Rate per 100,000	% of Total Cases	Population
Ethnicity				
White	125	25,773	66.5%	485
Black	47	62,667	25.0%	75
Hispanic	12	11,321	6.4%	106
Asian*	1	1,266	0.5%	79
Native American	3	60,000	1.6%	5
Total	188		100.0%	
*Asian Ethnicity				
Chinese				
Filipino				
Hawaiian/PI	1		0.5%	
Japanese				
Korean				
SE Asian				
Other				
Total	1		0.5%	
Age				
13-26	20	12,500	10.6%	160
27-29	18	31,034	9.6%	58
30-34	38	38,000	20.2%	100
35-39	46	52,273	24.5%	88
40+	66	19,130	35.1%	345
Total	188	25,067	100.0%	751

Males Who Have Sex With Males

	No. of Cases	Rate per 100,000	% of Total Cases	Population
Ethnicity				
White	6,915	25,915	79.2%	26,683
Black	633	15,327	7.3%	4,130
Hispanic	900	15,379	10.3%	5,852
Asian*	248	5,709	2.8%	4,344
Native American	30	12,448	0.3%	241
Total	8,726		100.0%	

*Asian Ethnicity

Chinese	70		0.8%	
Filipino	90		1.0%	
Hawaiian/PI	16		0.2%	
Japanese	33		0.4%	
Korean	4		0.0%	
SE Asian	14		0.2%	
Other	21		0.2%	
Total	248		2.8%	

Age

13-26	293	3,335	3.4%	8,786
27-29	583	18,356	6.7%	3,176
30-34	1,805	32,956	20.7%	5,477
35-39	2,084	43,129	23.9%	4,832
40+	3,961	20,870	45.4%	18,979
Total	8,726	21,154	100.0%	41,250

Males Who Have Sex With Females & Males

	No. of Cases	Rate per 100,000	% of Total Cases	Population
Ethnicity				
White	270	3,036	51.4%	8,894
Black	122	8,866	23.2%	1,376
Hispanic	105	5,385	20.0%	1,950
Asian*	24	1,657	4.6%	1,448
Native American	4	5,000	0.8%	80
Total	525		100.0%	

*Asian Ethnicity

Chinese	5		1.0%	
Filipino	6		1.1%	
Hawaiian/PI	1		0.2%	
Japanese	3		0.6%	
SE Asian	7		1.3%	
Other	2		0.4%	
Total	24		4.6%	

Age

13-26	24	819	4.6%	2,929
27-29	42	3,966	8.0%	1,059
30-34	110	6,024	21.0%	1,826
35-39	94	5,835	17.9%	1,611
40+	255	4,031	48.6%	6,326
Total	525	3,818		13,751

Females Who Have Sex With Males and Inject Drugs

	No. of Cases	Rate per 100,000	% of Total Cases	Population
Ethnicity				
White	91	5,928	32.7%	1,535
Black	147	12,760	52.9%	1,152
Hispanic	24	6,667	8.6%	360
Asian*	10	5,348	3.6%	187
Native American	6	20,000	2.2%	30
Total	278		100.0%	
*Asian Ethnicity				
Chinese	3		1.1%	
Filipino	2		0.7%	
Hawaiian/PI	2		0.7%	
Japanese				
Korean	1		0.4%	
SE Asian	1		0.4%	
Other	1		0.4%	
Total	10		3.6%	
Age				
13-26	16	2,309	5.8%	693
27-29	25	10,081	9.0%	248
30-34	64	17,391	23.0%	368
35-39	63	19,091	22.7%	330
40+	110	6,619	39.6%	1,662
Total	278	8,424	100.0%	3,301

Males Who Have Sex With Females and Inject Drugs

	No. of Cases	Rate per 100,000	% of Total Cases	Population
Ethnicity				
White	277	6,962	36.9%	3,979
Black	349	11,787	46.5%	2,961
Hispanic	106	10,850	14.1%	977
Asian*	12	2,542	1.6%	472
Native American	6	7,792	0.8%	77
Total	750		100.0%	
*Asian Ethnicity				
Chinese	2		0.3%	
Filipino	2		0.3%	
Hawaiian/PI	3		0.4%	
Japanese				
Korean				
SE Asian	4		0.5%	
Other	1		0.1%	
Total	12		1.6%	
Age				
13-26	28	1,546	3.7%	1,811
27-29	55	8,397	7.3%	655
30-34	151	13,387	20.1%	1,128
35-39	168	16,867	22.4%	996
40+	348	8,898	46.4%	3,911
Total	750	8,824	100.0%	8,501

Females Who Have Sex With Females & Males -and Inject Drugs

	No. of Cases	Rate per 100,000	% of Total Cases	Population
Ethnicity				
White	4	1,347	33.3%	297
Black	6	2,765	50.0%	217
Hispanic	1	1,220	8.3%	82
Asian	0	0	0.0%	34
Native American	1	20,000	8.3%	5
Total	12		100.0%	
Age				
13-26	1	763	8.3%	131
27-29	1	2,128	8.3%	47
30-34	3	4,286	25.0%	70
35-39	3	4,839	25.0%	62
40+	4	1,270	33.3%	315
Total	12	1,920	100.0%	625

Females Who Have Sex With Females and Inject Drugs

	No. of Cases	Rate per 100,000	% of Total Cases	Population
Ethnicity				
White	4	1,465	66.7%	273
Black	1	503	16.7%	199
Hispanic	1	1,333	16.7%	75
Asian	0	0	0.0%	29
Native American	0	0	0.0%	5
Total	6		100.0%	
Age				
13-26	0	0	0.0%	121
27-29	0	0	0.0%	43
30-34	3	4,688	50.0%	64
35-39	2	3,448	33.3%	58
40+	1	346	16.7%	289
Total	6	1,043	100.0%	575

Females Who Have Sex With Females & Males

	No. of Cases	Rate per 100,000	% of Total Cases	Population
Ethnicity				
White	2	27	66.7%	7,486
Black	1	64	33.3%	1,568
Hispanic	0	0	0.0%	2,056
Asian	0	0	0.0%	4,586
Native American	0	0	0.0%	54
Total	3		100.0%	

Age

13-26	1	30	33.3%	3,308
27-29	0	0	0.0%	1,181
30-34	1	57	33.3%	1,757
35-39	0	0	0.0%	1,576
40+	1	13	33.3%	7,928
Total	3		100.0%	15,750

Females Who Have Sex With Males

	No. of Cases	Rate per 100,000	% of Total Cases	Population
Ethnicity				
White	63	46	39.4%	135,508
Black	55	202	34.4%	27,258
Hispanic	30	80	18.8%	37,294
Asian*	10	12	6.3%	84,056
Native American	2	210	1.3%	952
Total	160		100.0%	

*Asian Ethnicity

Chinese	2		1.3%	
Filipino	5		3.1%	
Hawaiian/PI	1		0.6%	
Japanese	1		0.6%	
Korean	1		0.6%	
SE Asian				
Other				
Total	10		6.3%	

Age

13-26	16	27	10.0%	59,860
27-29	24	112	15.0%	21,379
30-34	37	116	23.1%	31,794
35-39	30	105	18.8%	28,533
40+	53	37	33.1%	143,483
Total	160	56	100.0%	285,049

Males Who Have Sex With Females

	No. of Cases	Rate per 100,000	% of Total Cases	Population
Ethnicity				
White	28	24	24.1%	118,013
Black	44	200	37.9%	22,051
Hispanic	35	101	30.2%	34,774
Asian*	8	10	6.9%	76,968
Native American	1	129	0.9%	774
Total	116		100.0%	
*Asian Ethnicity				
Chinese	4		3.4%	
Filipino	2		1.7%	
Hawaiian/Pf	1		0.9%	
Japanese				
Korean				
SE Asian				
Other	1		0.9%	
Total	8		6.9%	
Age				
13-26	5	9	4.3%	53,792
27-29	9	46	7.8%	19,446
30-34	26	78	22.4%	33,530
35-39	18	61	15.5%	29,585
40+	58	50	50.0%	116,190
Total	116	46	100.0%	252,543

Females Who Have Sex With Females

	No. of Cases	Rate per 100,000	% of Total Cases	Population
Ethnicity				
White	0			6,915
Black	0			1,449
Hispanic	0			1,900
Asian	0			4,236
Native American	0			50
Total	0			
Age				
13-26	0			3,056
27-29	0			1,091
30-34	0			1,623
35-39	0			1,456
40+	0			7,324
Total	0			14,550

V. PREVALENCE AND INCIDENCE OF HIV INFECTION

The University of California, San Francisco Department of Public Health AIDS Office, and other researchers have conducted a number of HIV/AIDS studies to examine where the epidemic has been, where it is currently, and where it is going. This section summarizes data about HIV **prevalence** (the total number of people infected with HIV in a given population divided by the size of that population) and **incidence** (the number of new infections that occur in one year divided by the size of the uninfected population at the start of that year) found in published and unpublished manuscripts, conference abstracts, and formal reports. To the degree possible, HIV prevalence and incidence results from various studies are summarized according to the HPPC-defined behavioral risk populations. However, in most instances, the studies recruited participants based on characteristics other than behavioral risk populations. In this summary, the language used to describe the population is that of the research study. In addition, HPPC co-variates (e.g., race/ethnicity) and co-factors (e.g., STD infection) found to be independent predictors of HIV infection are noted for each population group. The studies included in this section are recent (sampling took place in 1990 or later) and local (sampling took place in the San Francisco/Bay Area) because of the temporal and geographic differences in the HIV epidemic.

Although analysis of prevalence and incidence data provides a more current picture of the epidemic than a reporting of AIDS cases, it is not without limitations. Prevalence and incidence studies are usually conducted with populations empirically thought to be at risk for HIV infection. Therefore, there are several populations for which there are limited prevalence data and many populations that lack incidence data. Among the studies that have been conducted in the San Francisco area, four main factors limit the analysis of the results according to the HPPC behavioral risk populations and co-variates: 1) Most studies recruit participants and discuss results based on subjects' self-identified sexual orientation rather than their risk behaviors; 2) injection drug users are often combined with sexual behavior populations particularly in the MSM studies; 3) males and females who self-identify as bisexual or who have sex with both men and women are usually grouped with gay men and lesbians; and 4) most studies do not sample a sufficient number of people in different racial/ethnic groups to make cross-group comparisons possible.

Summary of Prevalence Results for Adult Females

Results from prevalence studies with lesbian and bisexual women demonstrate the need to define populations by their behaviors rather than their self-identified sexual orientation. While lesbian and bisexual women represent a relatively small number of HIV infections and AIDS cases, their risk for infection is increased substantially by injection drug use and sexual contact with gay or bisexual men and injection drug using men. Some behavioral studies have noted that lesbian and bisexual women are more likely than heterosexual women to report injection drug use, needle sharing, and unprotected anal sex with men (Magura et al., 1992; Young et al., 1992).

HIV prevalence rates found for heterosexual samples of women are low and very stable. However, seroprevalence increases significantly for women with a history of sex work, incarceration, STD infection, and non-injection drug abuse. The increased prevalence rate in these sub-populations of heterosexual women is probably associated with socioeconomic factors and an increased rate of high-risk sexual behaviors (e.g., sex trade and multiple partners). Although the prevalence rates and risk behaviors of transgender FTM (pre-op) and MTF (post-op) populations are not well studied, HIV prevalence results (15%) and high rates of co-factors found in a chart review study suggest that this population may be at increased risk for infection.

Females who are injection drug users continue to be the female population with the highest rate of HIV infection. Significant declines in needle sharing behaviors have decreased the amount of parenteral transmission of HIV in this population, but similar changes in sexual risk behavior have not occurred. Currently, unsafe sexual behavior with male partners appears to be the primary factor associated with HIV transmission for women who inject drugs (Moss, 1990, Watters, 1994).

Females who have Sex with Females (FSF)

Females who have Sex with Females and Males (FSF/M)

The AIDS case reporting system and most HIV prevalence studies combine women who self-identify as bisexual with women who self-identify as lesbian. Thus, the results for studies of women who have sex with both men and women are often combined with the results for lesbian women rather than for heterosexual women. Fortunately, recent prevalence studies with women who self-identify as lesbian or bisexual have collected the risk behavior data necessary to make general comparisons possible across the HPPC-behavioral risk populations.

Local AIDS case surveillance and prevalence studies demonstrate that female-to-female transmission of HIV is very rare. To date, no AIDS cases have been reported among females whose only risk was unprotected sex with another woman (SFDPH, AO, 9/96). In a recent seroprevalence study of self-identified lesbian and bisexual women, none of the women who reported *only* having sex with women since 1978 were infected with HIV (Lemp et al., 1995). Similarly, HIV surveillance in a drug-free detoxification program from 1990-1994 did not detect any infection among women who have sex with only women (SFDPH, AO, 5/96).

Although little evidence of female-to-female transmission of HIV exists, lesbian women may still be at risk for infection through participation in other risk behaviors. Studies have shown that many women who self-identify as lesbian have had sex with men in the past or occasionally have sex with men. One study found that while 68% of the sampled women self-identified as lesbian (and the remainder as bisexual), only 18% had sex exclusively with females since 1978 (Lemp et al., 1993). While identifying as lesbian, women who have had sex with men are categorized as FSF/M.

A study of lesbians and bisexual women found that the seroprevalence rate increased from 0% to 0.45% if women reported sexual contact with men and the risk of infection increased substantially if these women reported that they had sex with high risk men (e.g., MSM/Fs or

male IDUs). Twenty percent of the sample had unprotected sex with a gay/bisexual man, and this group was 8.2 times more likely to be infected with HIV compared to all other women in the sample; 12% reported unprotected sex with a male injection drug user and this group was 7.6 times more likely to be infected than all other women in the sample (Lemp et al., 1995).

Females who have Sex with Females & Inject Drugs (FSF-IDU)

Females who have Sex with Females and Males & Inject Drugs (FSF/M - IDU)

As of September 30, 1996 all of the AIDS cases reported among lesbian or bisexual women were IDUs (SFDPH, AO 9/96). To date, lesbian and bisexual IDUs account for 3% of the total female AIDS cases. In sharp contrast to the low seroprevalence found for lesbian and bisexual women who do not inject drugs, most studies have found prevalence rates for lesbian and bisexual IDUs comparable to those reported for heterosexual women who inject drugs. A study of self-identified lesbian and bisexual women recruited from public venues found that 8% of the injection drug users were infected with HIV (Lemp et al., 1995). Women in this study who reported a history of injection drug use were 18.5 times more likely to be infected with HIV than women who did not inject drugs. African American women who injected drugs were five times more likely to be infected than White women (Lemp et al., 1995). An even higher rate of infection (17%) was found among women seeking methadone drug treatment (SFDPH, AO 5/96). Unfortunately, small sample size did not allow for racial/ethnic comparisons in this surveillance study.

Females who have Sex with Males (FSM)

About 30% of the female AIDS cases reported through September 30, 1996 have occurred among women whose only exposure was reported to be through heterosexual contact (SFDPH, AO 9/96). However, women who have sex with low-risk male partners (e.g., men who do not inject drugs nor have sex with other men) continue to be at very low risk for infection. Data from a population-based survey in multi-ethnic neighborhoods (Fullilove et al., 1992) and the annual survey of childbearing women in San Francisco (SFDPH, AO 5/96) show a stable prevalence rate around 0.2%. This low rate of HIV infection for heterosexual females makes it difficult to observe any trends that may be related to race/ethnicity. An alarming divergence from this picture of low infection rates occurs when the presence of co-factors such as drug use, incarceration, STD infection, and sex work are taken into account. The prevalence rate is 4% among heterosexual women in alcohol treatment, (Avins et al., 1994), 3% among incarcerated women (Singleton, 1990), 2% among those in a drug free detox program, (SFDPH, AO, 5/96), 2% among crack users, (Edlin, 1996), 2% among women seeking STD treatment, (SFDPH, AO, 1993) and 14% among women in the sex industry (SFDPH, AO, 2/92).

Females who have Sex with Males & Inject Drugs (FSM-IDU)

Heterosexual women who inject drugs account for over half of the females AIDS cases in San Francisco (53%). The prevalence rates for this population of women range from 5% to 12%. Studies which found lower rates of infection typically recruited women from clinics or households (Fullilove, 1992; Avins et al., 1994), while higher seroprevalence rates are noted in

studies which use street-based sampling techniques (Watters, 1994; Watters et al., unpublished; Zolopa et al., 1994; SFDPH, AO 2/96). Most recent studies in San Francisco have found that sexual behavior (trading sex for money/drugs, multiple partners, unprotected sex) may be the principal risk factor for HIV infection in heterosexual female IDUs (Moss et al., 1990; Watters, 1994; Watters, et al., unpublished). In addition, African American and Latina women who inject drugs appear to be at increased risk for infection. One study found that African American women were 5.3 times more likely and Latinas were 3.7 times more likely than white women to be infected with HIV (Watters, et al., unpublished).

Transgender Female Populations

Little is known about the HIV prevalence rate or risk behaviors of transgender male-to-female (post-op) or transgender female-to-male (pre-op) populations. However, chart review data for 89 clients seeking hormone support for gender reassignment at a local clinic showed that 15% were HIV positive or diagnosed with AIDS. In addition, the documented rate of co-factors such as a history of substance abuse and STD infection was very high. Although it is not known whether unsafe needle sharing practices (for both hormone treatment or recreational drug use) or unsafe sexual behaviors (with males or females) contribute to HIV prevalence in this population, the seroprevalence rate is similar to rates for sex workers and injection drug using female populations. Exhibit 3.27 summarizes the female populations prevalence data presented above.

Exhibit 3.34 summarizes the information presented in this narrative. At the end of the table are the bibliographic citations used in the table. When numbers appear in parentheses in the "Prevalence Results" column, the first represents the number found to be HIV-positive, and the second is the sample size. The reported prevalence findings of some studies include multiple behavioral risk populations; a note is included when the findings cannot be stratified that the finding includes members from another behavioral risk group.

Exhibit 3.34

Prevalence Studies—Adult Females			
Behavioral Risk Groups	Prevalence Results	Racial/Ethnic Groups Most At Risk	Key Behavioral Factors For HIV Infection
Females who have sex w/ females; Females who have sex with females and males	0% (0/90)—FSF 0.45% (2/446)—FSF/M 1993 HIV Seroprevalence and Risk Behavior Survey of Lesbian and Bisexual Women. ⁵ 0% (0/31) 1990-1994 Drug-Free Detox Program. ⁷	Insufficient data to analyze by race/ethnicity.	High rates of unprotected sex with men at risk for HIV infection (MSM/F or IDUs).
Females who have sex with females and inject drugs; Females who have sex with females and males and inject drugs	7.7% (4/52) 1993 SFDPH, AO HIV Seroprevalence and Risk Behavior Survey of Lesbian and Bisexual Women ⁵ 2% (2/76; includes FSMs) 1990-1992 Representative Sample of Homeless Adults. ¹² 16.7% (2/12) 1994 Methadone Treatment. ⁷ 1.7% (1/60) 1990-1994 Drug-Free Detox Program. ⁷	African American women were five times more likely to be infected than White women.	Needle sharing and sex with a man at risk for HIV infection (MSM/F or IDU).
Females who have sex w/ males	0.2% (1/623) 1988-1989 AMEN Multiethnic Neighborhoods Study ³ 0.21% (5/2435) 1993 Survey of Childbearing Women ⁷ 0.6% (1/170) 1990-1992 Representative Sample of Homeless ¹²	Insufficient data to analyze by race/ethnicity.	Unprotected sex with males.

Prevalence Studies—Adult Females			
Behavioral Risk Groups	Prevalence Results	Racial/Ethnic Groups Most At Risk	Key Behavioral Factors For HIV Infection
Females who have sex w/males (cont.)	<p>1.5% 1996 Estimated prevalence for all heterosexual adults in SF⁴</p> <p>1.5% (9/613) 1995 SF Municipal STD (women w/ no other risk factor)⁷</p> <p>1.9% (1/54) 1995 SF Municipal STD clinic (women w/ at-risk partner)⁷</p> <p>2.3% (includes MSF's) 1996 Multicenter Crack Study²</p> <p>2.2% (4/180) 1990-1994 Drug Free Detox Program⁷</p> <p>3.6% (5/138) 1990-91 Non-IDUs in alcohol TX programs.¹</p> <p>13.9% (Sex workers who do not inject drugs). 1991-1992 Project Aware Study.⁸</p>	African Americans were more likely to be infected.	Sex with partner at risk for infection (IDU or MSM/F).
Females who have sex w/ males and inject drugs	<p>10.0% (15/150) 1994 Methadone TX Programs.⁷</p> <p>6.7% (5/76) 1990-1992 Sample of Homeless Adults.¹²</p> <p>11.4% (46/403) 1991-1992 Street Based sample of female IDUs (Urban Health Study).¹¹</p> <p>14% 1987-1992 Urban Health Study.¹⁰</p>	African American and Latina women were significantly more likely to be infected.	<p>The use of a shooting gallery was associated with HIV.</p> <p>Trading sex for money or drugs, having sex with non-steady partners and history of STD were associated with HIV infection.</p>

Prevalence Studies—Adult Females			
Behavioral Risk Groups	Prevalence Results	Racial/Ethnic Groups Most At Risk	Key Behavioral Factors For HIV Infection
	12% (Sex workers who inject drugs). 1991-1992 Project Aware Study. ⁸	Most infected women were African American.	
Females who have sex with males and inject drugs (cont.)	<p>6.0% (5/83) 1990-1991 IDUs in alcohol treatment programs.¹</p> <p>4.7% (3/64) 1995 SF Municipal STD Clinic Blinded Seroprevalence.⁷</p> <p>2.6% (7/268) 1990-1994 Drug-Free Detox Program.⁷</p> <p>2.8% (2/71) 1988-1989 AMEN (AIDS in Multiethnic Neighborhoods).³</p>		
Other female adult populations			
<i>Incarcerated Females</i>	3.1% (all correctional systems in California) 1988 seroprevalence ⁹		Injection drug use was a significant risk factor for this population.
<i>Transgender MTF</i>	15% (92% were MTF; 8% FTM). 1993 Chart review data for individuals seeking hormone support for gender reassignment. ⁶		

Key to Citations Listed in Prevalence Adult Female Table

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Summary of Prevalence Results for Adult Males

San Francisco has the highest number of HIV-infected persons per capita of any major city within the United States. The vast majority of persons currently infected with HIV are either gay and bisexual men or gay and bisexual men who inject drugs. It is estimated that almost half of those in the MSM cluster of behavioral risk populations in San Francisco are infected with HIV. This prevalence in part can be accounted for by high rates of infection that took place in the early to mid-1980s, but an alarmingly high prevalence rate among younger gay and bisexual men points to a resurgence of new infection in this sub-population. There also appears to be a trend towards higher rates of seroprevalence among non-White men, especially African American men. Although many studies do not report the prevalence rates of gay and bisexual men separately, those studies that have stratified by sexual orientation have found much lower rates of infection among bisexual men. The increased risk of being a gay or bisexual man who also injects drugs is evident, as this population has the highest prevalence rate in San Francisco.

For males who do not have sex with males, injection drug use continues to be the primary risk factor associated with HIV infection. The prevalence rate in this population is about 14% and appears to have stabilized over the past few years. Although unsafe sexual activity may be the primary route of transmission for heterosexual female IDUs, it is not as important a predictor for heterosexual male IDUs. However, co-factors such as non-injection drug use, incarceration, and STD infection are associated with higher rates of infection among heterosexual male IDUs.

Males who have Sex with Males (MSM)

Males who have Sex with Males and Females (MSM/F)

To date, gay and bisexual men account for 84% of the cumulative male AIDS cases in San Francisco (SFDPH, AO, 2/92). Out of 28,000 men, women, and children estimated to be HIV infected and living in San Francisco, approximately 25,000 are thought to be gay and bisexual men. With an estimated 59,000 gay and bisexual men living in San Francisco, the estimated seroprevalence rate for this population is 42% (SFDPH, AO, 2/92). Local studies in various settings support this estimate with prevalence findings ranging from about 30% to 50% (Osmond et al., 1994; Fullilove et al., 1992; Zolopa et al., 1994).

Unfortunately most studies continue to group men who self-identify as bisexual with those who identify as gay or homosexual even though their risk behaviors and seroconversion rates may be quite different. Those studies that have been able to separate the two populations generally show higher prevalence rates among gay males. For example, the rate of HIV infection in a recent sample of homeless gay men was much higher than the rate found for bisexual men (45% vs. 15%) (Zolopa et al., 1994).

Several studies have shown a trend toward higher rates of infection among gay and bisexual men of color, particularly African American men. (Osmond et al., 1994; Fullilove et al., 1992; SFDPH, AO, 5/96). For example, one study found that non-White men were three times more likely to be seropositive based on race alone, accounting for the independent effects of injection drug use, number of receptive anal intercourse partners, and first year of regular intercourse (Osmond et al., 1994). Unfortunately, most studies of gay and bisexual men define Asian, Pacific Islander, and Native American populations inconsistently and often combine these groups into an “other category.” One study found a 43% prevalence rate in a combined “other category,” but did not separate Asians, Pacific Islanders, and Native Americans to determine which racial/ethnic groups contributed to this high rate of infection (Fullilove et al., 1992).

Males who have Sex with Males & Inject Drugs (MSM-IDU)

Males who have Sex with Males and Females & Inject Drugs (MSM/F-IDU)

Gay and bisexual men who inject drugs account for almost 10% of the male AIDS cases reported to date (SFDPH, AO, 9/96). Although many studies do not stratify by injection drug use when examining prevalence rates in gay and bisexual male populations, several studies found that injection drug use was an independent predictor of HIV infection in adult gay and bisexual male populations (Osmond et al., 1994; Zolopa et al., 1994; Buchbinder et al., in press). For example, a population-based study which recruited men in multi-ethnic neighborhoods found a much higher rate of infection among gay and bisexual IDUs (59%) than it did in men who did not report injection drug use (32%) (Fullilove et al., 1992). Another study showed that even when controlling for the effect of age, race, and number of sexual partners, injection drug users were 2.5 times more likely to be infected than their non-IDU peers (Osmond et al., 1994). The additive effect of injection drug use and having sex with MSM partners puts this population at highest risk of infection.

Males who have Sex with Females (MSF)

Males (who do not inject drugs) who have sex exclusively with females account for just 0.2% of the total number of male AIDS cases (SFDPH, AO, 9/96). A recent population-based study found a prevalence rate of only 0.5% for men with no identified risk factors (Fullilove et al., 1992) and screening data on civilian applicants for military service (1985-1995) reveal an extremely low prevalence rate in this population (0.41%) (SFDPH, AO, 5/96). Although the prevalence rate for heterosexual men is generally less than one percent, it increases among men who have high-risk female partners and among men who have other risk behaviors or co-factors. The prevalence rate is 2.6% among men in alcohol treatment (Avins et al., 1994), 5.3% among incarcerated men (Singleton et al., 1990), 2.5% among those in a drug free detox program (SFDPH, AO, 5/96), 2.3% among crack users (Edlin et al., 1996), and 2.4% among men seeking STD treatment (SFDPH, AO, 5/96). Although racial/ethnic differences are not systematically evaluated, an STD clinic study and a street-based study with homeless adults found that African American men were significantly more likely to be infected with HIV than all other ethnic groups (Zolopa et al., 1994; SFDPH, AO, 1993).

Males who have Sex with Females & Inject Drugs (MSF-IDUs)

HIV infection through needle sharing has been the predominant means of infection for heterosexual men in San Francisco. As of September 30, 1996 heterosexual IDUs accounted for 5% of the total number male AIDS cases and 76% of the heterosexual male cases in San Francisco (SFDPH, AO, 9/96). Local studies generally have found HIV seroprevalence rates for heterosexual male IDUs to range between 5% and 14%, depending on sampling location. The highest rates of infection are found in street-based samples (Watters, 1994; Watters, et al., 1992), while lower rates are found in studies which recruit from drug treatment programs (Avins et al., 1994; SFDPH, AO, 5/96), STD clinics (SFDPH, AO, 5/96) and households (Fullilove et al., 1992). One study with homeless adults found that injecting drugs in a shooting gallery was associated with HIV, independent of injection drug use (Zolopa et al., 1994). Another study of heterosexuals in an alcohol treatment program found that history of syphilis infection was a significant predictor of HIV infection (Avins et al., 1994).

Transgender Male Populations

Little is known about the prevalence of HIV infection or risk behaviors of transgender male-to-female (pre-op) or transgender female-to-male (post-op) populations. However, chart review data for 89 clients seeking hormone support for gender reassignment at a local clinic show that 15% were HIV positive or diagnosed with AIDS. It is not known whether unsafe needle sharing practices (for both hormone treatment or recreational drug use) or unsafe sexual behaviors (with males or females) contribute to this prevalence rate.

The information detailed above appears on the following pages in exhibit 3.35. At the end of the table are the bibliographic citations used in the table. When numbers appear in parentheses in the "Prevalence Results" column, the first represents the number found to be HIV-positive, and the second is the sample size. The reported prevalence findings of some studies include multiple behavioral risk populations; a note is included when the findings cannot be disaggregated that the finding includes members from another behavioral risk group.

Exhibit 3.35

Prevalence Studies—Adult Males			
Behavioral Risk Groups	Prevalence Results	Racial/Ethnic Groups Most At Risk	Key Behavioral Factors For HIV Infection
<p>Males who have sex w/ males</p> <p>Males who have sex with males and females</p>	<p>29% (54/187) 1992 SFYMHHS results for males 27-29 years (includes IDU MSMs).⁵</p> <p>40.7% 1996 Estimated rates in 96 large US Cities (includes IDU MSMs)⁴</p> <p>51% (20/39) 1990-1994 Drug-Free Treatment Program.⁸</p> <p>28% (222/793) 1995 SF Municipal STD Clinic blinded seroprevalence survey.⁸</p> <p>45% (46/102) 1990-1992 MSM (includes IDUs) Representative Sample of Homeless¹¹</p> <p>15% (18/118) 1990-1992 MSM/F (includes IDUs) Representative Sample of Homeless¹¹</p> <p>31.9% (36/113) 1988-1989 AMEN (Multiethnic Neighborhoods Study).³</p>	<p>Non-White men were 3 times more likely to be infected than White men.</p> <p>African Americans were significantly more likely to be infected.</p>	<p>Seroprevalence was associated with injection drug use, the number of sexual partners, and the number of receptive anal intercourse partners in the past year.</p> <p>Self-reported homosexuality and bisexuality were the strongest predictors of HIV infection in males. Injection drug use and multiple partners were also important predictors.</p>
<p>Males who have sex w/ males and inject drugs;</p> <p>Males who have sex with males and females and inject drugs</p>	<p>29% (54/187) 1992 SFYMHHS results for males 27-29 years (includes non-IDU MSMs).⁵</p>	<p>Non-White men were 3 times more likely to be infected than White men.</p>	<p>Seroprevalence was associated with injection drug use, the number of sexual partners, and the number of receptive anal intercourse partners.</p>

Prevalence Studies—Adult Males			
Behavioral Risk Groups	Prevalence Results	Racial/Ethnic Groups Most At Risk	Key Behavioral Factors For HIV Infection
Males who have sex w/ males and inject drugs; Males who have sex with males and females and inject drugs	<p>59.0% (23/39) 1988-1989 AMEN Multiethnic Neighborhoods Survey.³</p> <p>28% (23/81) 1995 SF Municipal STD Clinic blinded seroprevalence survey⁷</p> <p>40.7% 1996 Estimated rates in 96 large US Cities (includes non-IDU MSMs)⁴</p> <p>31% (37/118) 1990-1994 Drug-Free TX Program.⁷</p> <p>45% (46/102) 1990-1992 MSM (includes IDUs) Representative Sample of Homeless¹¹.</p> <p>15% (18/118) 1990-1992 MSM/F (includes IDUs) Representative Sample of Homeless¹¹</p> <p>15% (2/13) 1994 Methadone Treatment Programs.⁷</p>	African Americans had a higher rate of infection.	Self reported homosexuality and bisexuality were the strongest predictors of HIV infection in males. Injection drug use, injecting in a shooting gallery, and multiple partners were also important predictors.
Males who have sex w/ females	<p>0% (0/257) 1995 Military Recruits⁸</p> <p>1.5% (26/1724) 1995 Municipal STD clinic (males w/no other risk factor).⁸</p>		

Prevalence Studies—Adult Males			
Behavioral Risk Groups	Prevalence Results	Racial/Ethnic Groups Most At Risk	Key Behavioral Factors For HIV Infection
Males who have sex w/ females (cont)	<p>1.5% 1996 Estimated prevalence for all heterosexual adults in SF⁴</p> <p>2.4% (2/83) 1995 SF Municipal STD Clinic (males w/at-risk partner).⁸</p> <p>0.5% (2/424) 1988-1989 AMEN (men w/no other risk factor)³</p> <p>5.1% (2/39) 1988-89 AMEN (men w/at-risk partners)³</p> <p>2.6% (10/378) 1990-1991 Heterosexuals in an alcohol treatment¹</p> <p>2.5% (11/434) 1990-1994 Drug-Free Detox Program.⁸</p> <p>2.3% (includes FSMs) 1996 Multicenter Crack/HIV Study²</p>	African Americans were more likely to be infected	History of syphilis infection was a significant predictor of HIV infection
Males who have sex w/ females and inject drugs	<p>5.7% (38/671) 1990-1994 Drug-Free TX Program.⁸</p> <p>5.0% (3/60) 1988-89 AMEN population based study in multi-ethnic neighborhoods.³</p> <p>8.3% (10/120) 1995 HIV Seroprevalence at SF Municipal STD Clinic.⁸</p> <p>4.2% (32/765: includes some non-IDUs) 1990-1992 Representative Sample of Homeless Adults.¹¹</p>	African American men were more likely to be infected	Injecting drugs in a shooting gallery was associated with HIV, independent of injection drug use.

Prevalence Studies—Adult Males			
Behavioral Risk Groups	Prevalence Results	Racial/Ethnic Groups Most At Risk	Key Behavioral Factors For HIV Infection
Males who have sex w/ females and inject drugs (cont)	<p>14% 1991 Street-based sample of male IDUs and 1986-1992 trend results (Urban Health Study).^{9,10}</p> <p>7.6% (20/261) 1990-1991 Heterosexuals in alcohol treatment program.¹</p> <p>9.7% (20/207) 1994 Methadone TX Programs.⁸</p>		History of STD infection was an independent predictor of HIV infection.
Other male adult populations <i>Incarcerated males</i>	<p>2.5% 1988 All Correctional systems in CA⁷</p> <p>5.3% 1988 Men arrested in San Francisco⁷</p>		Authors speculate that higher prevalence among men arrested in San Francisco reflects higher seroprevalence among IDUs in San Francisco, compared to the rest of California.
<i>Transgender FTM</i>	<p>15% (92% were MTF; 8% FTMs). 1993 chart review data for individuals seeking hormone support for gender reassignment⁶</p>		

Key to Citations for Adult Male Prevalence Table:

1. Avins AL, Woods WJ, Lindan CP, Hudes ES, Clark W, Hulley SB (1994). HIV infection and risk behaviors among heterosexuals in alcohol treatment programs. *JAMA*, 271(7), 515-518.
2. Edlin BR, Word CO, McCoy CB, Faruque S, Von Bargen JC, MacQueen KM, Homberg SD (1996). Differences in HIV In: *Abstracts of the 36th Interscience Conference of Antimicrobial Agents and Chemotherapy, New Orleans, Louisiana*.
3. Fullilove MT, Wiley J, Fullilove RE, Golden E, Catania J, Peterson J, Garrett K, Siegel D, Marin B, Kegeles S, Coates T, Hulley S (1992). Risk for AIDS in multiethnic neighborhoods in San Francisco, California. The population-based AMEN Study. *Western Journal of Medicine*, 157, 32-40.
4. Holmberg S (1996). The estimated prevalence and incidence of HIV in 96 large US metropolitan areas. *American Journal of Public Health*, 86(5), 642-654.
5. Osmond DH, Page K, Wiley J, Garrett K, Sheppard HW, Moss AR, Schragger L, Winkelstein W (1994). HIV infection in homosexual/ bisexual men, ages 18-29: the San Francisco young men's study. *American Journal of Public Health*, 84(12), 1933-1937.
6. Peterson J, Zevin B, Brody B. Characteristics of transgender persons attending a public clinic. In: *Abstracts of the 1995 American Public Health Association Annual Meeting, San Diego CA*.
7. Singleton JA, Perkins CI, Trachtenberg AI, Hughes MJ, Kizer KW, Ascher MS (1990). HIV antibody seroprevalence among prisoners entering the California correctional system. *Western Journal of Medicine*, 153, 394-399.
8. San Francisco Department of Public Health, AIDS Office (5/96). *HIV Seroprevalence Report*.
9. Watters JK (1994). Trends in risk behavior and HIV seroprevalence in heterosexual injection drug users in San Francisco 1987-1992. *Journal of Acquired Immune Deficiency Syndrome*, 7, 1276-1281.
10. Watters JK, Cheng Y-T, Bluthenthal R, Carlson JR, Lorvick JJ (1992). Drug injectors and HIV-1 infection in the San Francisco Bay Area. In: *Abstracts of the VIII International Conference on AIDS. Amsterdam, The Netherlands*.
11. Zolopa AR, Hahn JA, Gorter R, Miranda J, Wlodarczyk D, Peterson J, Pilot L, Moss AR (1994). HIV and tuberculosis infection in San Francisco's homeless adults; prevalence and risk factors in a representative sample. *JAMA*, 272(6), 455-461.

Summary of Prevalence Results for Female Youth

Female youth (13-24 years) currently comprise only 3% of the cumulative female AIDS cases (SFDPH, AO, 9/96). However, 12% of the female AIDS cases are found in the 25-29 year age group, and, with the 10 year incubation period, it is likely that many of these young women were infected in their teens. No data on HIV seroprevalence among young lesbians or bisexual women are available, but it is likely that they are at risk from the same behaviors as their older counterparts, primarily injection drug use and unprotected sex with MSM/Fs and/or injection drug-using gay or bisexual men.

The annual survey of childbearing women in San Francisco indicates that the rate of infection among young heterosexual females is comparable to that of adult female populations (0.16%) (SFDPH, AO, 5/96). This rate increases to about 1% with data obtained from sentinel surveillance sites which tend to sample higher risk youth (e.g., STD clinics, abortion clinics, juvenile detention centers, homeless youth clinics) and initial data from a study of young women of color residing in low income census tracts (SFDPH, AO, 5/96; SFDPH, AO, 1996a; SFDPH, AO, 1996b). While none of these sources are representative of the general female youth population, the seroprevalence rates among young heterosexual women who are not injecting drugs indicate a relatively low level of risk.

Among young women who have sex with men and inject drugs, seroprevalence rates increase to just over 1% in an STD clinic population and as high 4.6% in females attending a homeless youth clinic (SFDPH, AO, 5/96). The elevated rate of infection found among young homeless females who inject drugs may be related to the presence of multiple co-factors often associated with homelessness (e.g., drug use and sex trade) (Rotheran-Borus et al., 1991; SFDPH, AO, 5/93).

Summary of Prevalence Results for Male Youth

Male youth (13-24 years) currently account for 2% of the cumulative male AIDS cases (SFDPH, AO, 9/96). To date, the majority of adolescent male AIDS cases are among gay and bisexual men and gay and bisexual IDUs. Of the estimated 900 HIV-infected youth in San Francisco, approximately 73% are thought to be gay and bisexual young men (SFDPH, AO, 1993). Two population-based studies of young gay and bisexual men support such estimates with extremely high seroprevalence findings. The Young Men's Survey (YMS) sampled 17-22 year-old men from various venues in San Francisco and found an overall seroprevalence rate of 12% in 1992/93 and 8% in 1994/5 (Lemp et al., 1994; SFDPH, AO, unpublished). The San Francisco Young Men's Health Study (SFYMHS), used a multi-stage probability sampling strategy to survey young men in different neighborhoods and found a seroprevalence rate of 9% in men 18-26 years of age (Osmond et al., 1994). Sentinel surveillance studies in high risk settings have found even higher rates of infection. Screening at the municipal STD clinic found that 19% of the young gay and bisexual male population was infected with HIV and almost half (45%) of the young men screened in homeless clinics were infected (SFDPH, AO, 1996a). Although most studies did not distinguish gay from bisexual when assessing HIV infection rates, it appears that young gay-identified men are at much higher risk than young bisexual men. The

SFYMHS found that none of the men who self-identified as bisexual were infected with HIV (Osmond et al., 1994).

Most studies have provided strong evidence that young gay and bisexual African American, Latino, and Native American men are at increased risk of HIV infection. In addition, three studies found that lifetime history of STD, injection drug use, and number of recent and/or lifetime partners were independent predictors of HIV infection (Lemp et al., 1994; Osmond et al., 1994; SFDPH, AO, unpublished). Young gay and bisexual men who report a history of injection drug use have extremely high rates of infection: over a third (36%) of the injectors in the SFYMHS, 20% of those in YMS, 25% of those sampled at an STD clinic, and 60% of those accessing a homeless clinics were infected with HIV.

Seroprevalence data indicate that young men who have sex with women and do not inject drugs are at very low risk for acquiring HIV (0.15% among military recruits sampled between 1985 and 1995) (SFDPH, AO, 5/96). However, the rate of infection increases substantially for young heterosexual males who inject drugs (4% - 6%) (SFDPH, AO, 1996a). Consistent with the female findings, HIV rates among homeless heterosexual males who inject drugs (6%) are higher than the rates for any other MSF population. Prevalence study information for female and male youth is presented in Exhibit 3.36.

Exhibit 3.36

Prevalence Studies—Young Males and Females			
Behavioral Risk Groups	Prevalence Results	Racial/Ethnic Groups Most At Risk	Key Behavioral Factors For HIV Infection
Young females who have sex w/ females; Young females who have sex with females and males	No data available.		
Young females who have sex with females and inject drugs; Young females who have sex with females and males and inject drugs	No data available.		
Young females who have sex w/ males	<p>1% (1/100) 1996 Young Women's Survey (18-26 yrs; residing in low-income census tracts)⁴</p> <p>.88% (13/1471) 1992-1996 homeless youth attending youth clinics³</p> <p>.80% (3/367) 1992-1995 youth at a juvenile detention center³</p> <p>.85% (18/2096) 1989-1995 youth attending the municipal STD clinic³</p> <p>.66% (2/301) 1993 survey of youth at an abortion clinic⁵</p> <p>.16% (1/116) 1993 neonatal survey for females younger than 25 years⁵</p>		

Prevalence Studies—Young Males and Females			
Behavioral Risk Groups	Prevalence Results	Racial/Ethnic Groups Most At Risk	Key Behavioral Factors For HIV Infection
Young females who have sex w/ males and inject drugs	<p>4.6% (8/175) 1992-1996 homeless youth attending youth clinics³</p> <p>0% (0/11) 1992-1995 youth at a juvenile detention center³</p> <p>1.1% (1/88) 1989-1995 youth attending the municipal STD clinic³</p>		
Young males who have sex w/ females	<p>.12 (7/4,693) 1985-1995 military recruit screening⁵</p> <p>1.5% (9/614) 1992-1996 homeless youth attending youth clinics³</p> <p>0.07% (1/1430) 1992-1995 youth at a juvenile detention center³</p> <p>0.6% (23/3881) 1989-1995 youth attending the municipal STD clinic³</p>		
Young males who have sex w/females and inject drugs	<p>5.8% (4/69) 1992-1996 homeless youth attending youth clinics³</p> <p>0% (0/16) 1992-1995 youth at a juvenile detention center³</p> <p>4.1% (4/97) 1989-1995 youth attending the municipal STD clinic³</p>		
<p>Young males who have sex with males;</p> <p>Young males who have sex with males and females</p>	<p>45.1% (119/264) 1992-1996 homeless youth attending youth clinics³</p> <p>% (0/12) 1992-1995 youth at a juvenile detention center.³</p>	Young men of color had higher prevalence rates (particularly API & African American men)	

Prevalence Studies—Young Males and Females			
Behavioral Risk Groups	Prevalence Results	Racial/Ethnic Groups Most At Risk	Key Behavioral Factors For HIV Infection
Young males who have sex with males; Young males who have sex with males and females (cont)	19.3% (109/566) 1989-1995 youth attending the municipal STD clinic ³		
	12.1% (34/280) 1992-1993 Young Mens Survey (17-22 years) ¹	African Americans were 2.5 times more likely to be infected.	Lifetime history of STD, number of lifetime partners, and history of IDU were strong predictors of infection.
	8.0% (20/247) 1994-1995 Young Mens Survey (17-22 years) ⁶	African Americans were 5.3 times more likely to be infected.	Lifetime number of partners and history of IDU were associated with infection.
	8.6% (20/233) 1992-1993 San Francisco Young Mens Health Study (18-26 years) ²	Non-White populations were 3 times more likely to be infected (6/12 Filipino men sampled were infected)	Number of recent receptive anal intercourse partners, lifetime IDU, and beginning regular sex with men before 1985 were independently associated with being HIV-positive.
Young males who have sex with males and inject drugs; Young males who have sex with males and females and inject drugs	60.1% (107/178) 1992-1996 homeless youth attending youth clinics ³	Young men of color had higher prevalence rates (particularly API & African American men)	
	0% (0/5) 1992-1995 youth at a juvenile detention center ³		
	25.0% (15/60) 1989-1995 youth attending the municipal STD clinic ³		
	20.0% (14/70) 1992-1993 Young Mens Survey (17-22 years) ¹	African Americans were 2.5 times more likely to be infected.	Lifetime history of STD, number of lifetime partners, and history of IDU were strong predictors of infection.
	15.6% (7/45) 1994-1995 Young Mens Survey (17-22 years) ⁶	African Americans were 5.3 times more likely to be infected.	Lifetime number of partners, and history of IDU were associated with infection.

Prevalence Studies—Young Males and Females			
Behavioral Risk Groups	Prevalence Results	Racial/Ethnic Groups Most At Risk	Key Behavioral Factors For HIV Infection
<p>Young males who have sex with males and inject drugs;</p> <p>Young males who have sex with males and females and inject drugs. (cont.)</p>	<p>36.4% (16/44) 1992-1993 San Francisco Young Mens Health Study (18-29 years)²</p>	<p>Non-White populations were 3 times more likely to be infected (6/12 Filipino men sampled were infected)</p>	<p>Number of recent receptive anal intercourse partners, lifetime IDU, and beginning regular sex with men before 1985 were independently associated with being HIV positive.</p>

Key to Citations for the Young Male/Female Prevalence Table:

1. Lemp GF, Hirozawa AM, Givertz D, Giuliano N, Anderson L, Linegren ML, Janssen RS, Katz M (1994). Seroprevalence of HIV and risk behaviors among young homosexual and bisexual men. The San Francisco/Berkeley Young Men's Survey. *JAMA*, 272(6), 449-454.
2. Osmond DH, Page K, Wiley J, Garrett K, Sheppard HW, Moss AR, Schragger L, Winkelstein W (1994). HIV infection in homosexual/bisexual men, ages 18-29: the San Francisco Young Men's Health Study. *American Journal of Public Health*. 84(12), 1933-1937.
3. San Francisco Department of Public Health, AIDS Office (1996). *Family of survey seroprevalence analysis for revision of the youth and HIV report*.
4. San Francisco Department of Public Health, AIDS Office (1996). *Initial results for the young women's survey: a population-based survey of young women residing in low income census tracts*.
5. San Francisco Department of Public Health, AIDS Office (5/96). *HIV seroprevalence report*
6. San Francisco Department of Public Health, AIDS Office (Unpublished results). *HIV-seroprevalence and risk behaviors among young men who have sex with men, San Francisco/Berkeley (YMS2 vs. YMS3 data)*.

Incidence Results For All Populations

Females

There are no estimated seroconversion rates for lesbian or bisexual women. However, the incidence results for lesbian or bisexual women who also have sex with men or inject drugs are probably similar to those reported for heterosexual women and heterosexual women who inject drugs. Although the Multicenter Crack Cocaine study did not have a large enough sample of crack users to determine seroconversions among heterosexual women, (Edlin et al., 1996) estimated incidence rates for this population are around 0.3% per year (American Journal of Public Health; 1976, SFDPH, AO, 1992).

A recent study which documented the seroconversion rates of heterosexual men and women who injected drugs between 1985 and 1990 found that women were more likely to seroconvert than males, at a rate of 2.1% per year (Moss 1990). This study also found that African American women were 3.4 times more likely to seroconvert than other women, and that the strongest risk factor for seroconversion was number of sexual partners.

Males

The incidence rate for heterosexual men is estimated to be between 0.2% and 0.3% per year (American Journal of Public Health 1996; SFDPH, AO, 1992). Among heterosexual men who inject drugs, researchers have found rates between 1.7% and 2.0% per year (Moss et al., 1990; Watters et al., 1994; Watters et al., unpublished). One study of IDUs recruited from methadone maintenance programs found that African American males and men who remained in methadone maintenance for less than a year were more likely to seroconvert (Moss et al., 1990).

A recent study which estimated the prevalence and incidence of HIV infection in large metropolitan areas noted a 1.4% per year rate among gay and bisexual men in San Francisco (American Journal of Public Health 1994). However, local studies have found higher incidence rates, particularly among young gay and bisexual males. A 1995 vaccine feasibility study found an incidence rate of 2.7% per year for gay and bisexual men who had a mean age of 33 years (Buchinder, in press). This study found that younger men (<25 years old) were more likely to seroconvert than older males. In addition, injection drug use, unprotected receptive anal sex, and STD infection were independent predictors of seroconversion. The San Francisco Young Men's Health Study (SFYMHS) which sampled gay and bisexual men 18-29, also found an overall incidence rate of 2.7% per year. The incidence was highest among men 27-29 years old (3.7% per year) followed by 24-26 year olds (1.8% per year) and 18-23 year olds (1.2%). Estimated seroconversion rates for young men (17-22 years) based on the prevalence rates found in the Young Men's Survey (YMS) are as high as 4% per year. The high seroconversion rates found for young gay or bisexual men may be related to findings in the literature which suggest that young gay and bisexual men are engaging in riskier sexual activities than their older counterparts (Lemp et al., 1994; Osmond et al., 1994; Communication Technologies, 1989). Exhibit 3.37 summarizes this information on incidence studies

Exhibit 3.37

Incidence Studies—All Populations			
Behavioral Risk Groups	Incidence Results	Racial/Ethnic Groups Most At Risk	Key Behavioral Factors For HIV Infection
Females who have sex w/females; Females who have sex w/females and males	No data available.		
Females who have sex w/females and inject drugs; Females who have sex with females and males and inject drugs	No data available.		
Females who have sex w/ males	<p>0.0% per year 1996 Multicenter Crack Cocaine/HIV Infection Study (Non-injecting heterosexual crack smokers)²</p> <p>0.3% per year 1996 Estimated incidence for all heterosexual adults in San Francisco.³</p> <p>0.3% per year 1992 Consensus Report.⁶</p>		
Females who have sex w/males and inject drugs	<p>2.1% per year 1985-1990 seroconversion in IDUs in San Francisco.⁴</p> <p>2.0% per year 1992 Consensus Report⁶</p>	African Americans were 3.4 times more likely to seroconvert than their White/Other counterparts.	The strongest risk factor for HIV infection among was number of sexual partners (perhaps in association with crack use).

Incidence Studies—All Populations			
Behavioral Risk Groups	Incidence Results	Racial/Ethnic Groups Most At Risk	Key Behavioral Factors For HIV Infection
Males who have sex w/ females	<p>0.0% per year 1996 Multicenter Crack Cocaine/HIV Infection Study (Non-injecting heterosexual crack smokers)²</p> <p>0.3% per year Estimated incidence for all heterosexual adults in San Francisco.³</p> <p>0.2% per year 1992 Consensus Report⁶</p>		No data available.
Males who have sex w/ females and inject drugs	<p>1.7% per year 1985-1990 seroconversion in IDUs in San Francisco.⁴</p> <p>2.0% per year—1992 Consensus Report⁶</p>	African Americans were 3.4 times more likely to seroconvert than their White/Other counterparts.	Men who were in methadone maintenance for less than 12 lifetime months were more likely to seroconvert.
<p>Males who have sex with males;</p> <p>Males who have sex with males and females</p>	<p>2.7% per year Vaccine Feasibility Study (mean age=33 yrs)¹ Includes IDUs</p> <p>2.7% per year SFYMHS (Estimated incidence includes IDUs).⁵</p> <ul style="list-style-type: none"> • 1.2% per year (18-23 years) • 1.8% per year (24-26 years) • 3.7% per year (27-29 years) <p>4.0% per year (17-25 years)</p> <p>1.5% per year (26 + years) 1992 Consensus Report⁶</p>	<p>No racial/ethnic differences</p> <p>Non-White men were 3 times more likely to become infected than White men.</p>	<p>Age (< 25 years), injection drug use, unprotected receptive anal sex, condom failure, and STD infection were independent predictors of seroconversion.</p> <p>Note: The higher rate in the oldest age group is, in part, a cohort effect reflecting high incidence rates from the early 1980s in SF.</p>

Incidence Studies—All Populations			
Behavioral Risk Groups	Incidence Results	Racial/Ethnic Groups Most At Risk	Key Behavioral Factors For HIV Infection
Males who have sex with males; Males who have sex with males and females (cont)	1.4% per year Estimated incidence for all MSMs (including bisexuals and IDUs) in San Francisco ³		
Males who have sex with males and inject drugs	<p>2.7% per year Vaccine Feasibility Study (mean age=33 yrs)¹ Includes non-IDUs</p> <p>2.7% per year SFYMHS (Estimated incidence includes non-IDUs).⁵</p> <ul style="list-style-type: none"> • 1.2% per year (18-23 years) • 1.8% per year (24-26 years) • 3.7% per year (27-29 years) <p>3.5% per year (Only IDUs) 1992 Consensus Report⁶</p> <p>1.4% per year Estimated incidence for all MSMs (including bisexuals and IDUs) in San Francisco³</p>	No racial/ethnic differences	Age (< 25 years), injection drug use, unprotected receptive anal sex, condom failure, and STD infection were independent predictors of seroconversion.

Key to citations for Overall Incidence Table

1. Buchbinder SP, Douglas JM, McKirnan DJ, Judson FN, Katz M, MacQueen KM (In Press). Feasibility of Human Immunodeficiency Virus vaccine trials in homosexual men in the U.S: risk behavior, seroincidence and willingness to participate. *Journal of Infectious Diseases*.
2. Edlin BR, Word CO, McCoy CB, Faruque S, Von Bargen JC, MacQueen KM, Homberg SD (1996). Differences in HIV epidemics among crack cocaine smokers: a tale of three cities. in: *Abstracts of the 36th Interscience Conference of Antimicrobial Agents and Chemotherapy, New Orleans, Louisiana*.
3. Holmberg S (1996). The estimated prevalence and incidence of HIV in 96 large U.S. metropolitan areas. *American Journal of Public Health*, 86(5), 642-654.
4. Moss AR, Vranizan K, Gorter R, Bacchetti P, Watters J, Osmond D (1990). HIV seroconversion in intravenous drug users in San Francisco, 1985-1990. *AIDS*, 8, 223-231.
5. Osmond DH, Page K, Wiley J, Garrett K, Sheppard HW, Moss AR, Schragger L, Winkelstein W (1994). HIV infection in homosexual/bisexual men, ages 18-29: the San Francisco Young Men's Health Study. *American Journal of Public Health*. 84(12), 1933-1937.
6. San Francisco Department of Public Health, AIDS Office (2/92). *HIV Incidence and Prevalence in San Francisco in 1992: Summary Report from an HIV Consensus Meeting*.

VI. ESTIMATES OF HIV PREVALENCE

The preceding section, Section V, presented information about HIV prevalence based on studies conducted in San Francisco or nearby areas. This section presents information on HIV prevalence based on estimates constructed from the 1992 San Francisco Consensus Report. The advantage of the information presented in this section over that presented in the previous section is that the estimates here are by HPPC-defined behavioral risk groups; summaries in the previous section were based on whichever population the researchers chose to study.

The limitation of the information presented in this section is that it is essentially estimates based on estimates: population size estimates were imposed upon estimates of seroprevalence from the 1992 San Francisco Consensus Report. A further limitation of the data in this section is that it has not been updated in recent years. Therefore, it should only be used if information in the previous section does not serve the purpose. Further, in reading and using the information in this section, it must be stressed that these estimates are not real study data. Seroprevalence estimates should only be used for relative comparison purposes.

In the Consensus Report, the total number of HIV infections among adolescents and adults 13 years and older is 27,538 (excluding unknown race). This same number is used for these seroprevalence estimates. Seroprevalence estimates for groups with a population size less than 500 should be used with even greater caution than the other estimates, since small numbers increase the instability of estimates. These are indicated with an asterisk (*). Seroprevalence estimates for groups with a size less than 100 are not presented separately, but are combined with another group. These are indicated with a cross (†). There are eight exhibits in this section:

Exhibit 3.38 Estimated HIV Infection in San Francisco

Estimated HIV Infection by Age

Exhibit 3.39. Persons 13 - 26 Years

Exhibit 3.40. Persons 27 Years and Older

Estimated HIV Infection by Ethnicity

Exhibit 3.41. African Americans

Exhibit 3.42. Asians/Pacific Islanders

Exhibit 3.43. Latinos/Hispanics

Exhibit 3.44. Native Americans

Exhibit 3.45. Whites

Each exhibit shows for each behavioral risk group the estimated number infected, the estimated percent infected, and the estimated distribution of HIV infection among the behavioral groups. For example, in Exhibit 3.38, the third column shows that 0.36% of all women are estimated to be HIV-positive, and the fourth column shows that women represent 4.13% of all estimated HIV infections in the City.

Exhibit 3.38
Estimated HIV Infection in San Francisco
by Behavioral Risk Group

	Number of HIV Infected	% HIV Infected	% Total SF HIV Distribution
Overall Total	27,539	4.3%	100.00%
Behavioral Risk Groups			
Females who Have. . .			
. . . Sex with Females	12	0.08%	0.04%
. . . Sex with Females - IDU	25	4.35%	0.09%
. . . Sex with Males & Females	96	0.61%	0.35%
. . . Sex with Males & Females - IDU	75	12.00%	0.27%
. . . Sex with Males	529	0.19%	1.92%
. . . Sex with Males - IDU	401	12.15%	1.46%
Sub-Total	1,138	0.36%	4.13%
Males who Have. . .			
. . . Sex with Females	236	0.09%	0.86%
. . . Sex with Females - IDU	1,187	13.96%	4.31%
. . . Sex with Males & Females	4,599	33.45%	16.7%
. . . Sex with Males & Women - IDU	364	48.53%	1.32%
. . . Sex with Males	18,559	44.99%	67.39%
. . . Sex with Males - IDU	1456	64.71%	5.29%
Sub-Total	26,401	8.28%	95.87%

Note: The sum of all categories may not add to the total due to rounding.

Exhibit 3.39
Estimated HIV Infection Among 13 - 26 Year-olds
by Behavioral Risk Group

	Number of HIV Infected	% HIV Infected	% Total SF HIV Distribution
Overall Total	4703	3.48	17.08
Behavioral Risk Groups			
Females who Have...			
...Sex with Females	2	0.07%	0.01%
...Sex with Females - IDU	4	3.31%	0.01%
...Sex with Males & Females	16	0.48%	0.06%
...Sex with Males & Females - IDU	13	909%	0.05%
...Sex with Males	90	0.15%	0.33%
...Sex with Males - IDU	68	9.81%	0.25%
Sub-Total	193	0.29%	0.70%
Males who Have...			
... Sex with Females	57	0.11%	0.21%
... Sex with Females - IDU	142	7.84%	0.52%
... Sex with Males & Females	800	27.32%	2.9%
... Sex with Males & Females - IDU	62	38.75%	0.23%
... Sex with Males	3202	36.44%	11.63%
... Sex with Males - IDU	247	51.5%	0.90%
Sub-Total	4,510	6.64%	16.38%

Note: The sum of all categories may not add to the total due to rounding.

Exhibit 3.40
Estimates of HIV Infection Among 27+ Year-olds
by Behavioral Risk Groups

	Number of HIV Infected	% HIV Infected	% Total SF HIV Distribution
Overall Total	23,226	4.61%	84.34%
Behavioral Risk Groups			
Females who Have. . .			
. . . Sex with Females	11	0.10%	0.04%
. . . Sex with Females - IDU*	21	4.62%	0.08%
. . . Sex with Males & Females	80	0.64%	0.29%
. . . Sex with Males & Females - IDU*	62	12.56%	0.23%
. . . Sex with Males	439	0.19%	1.59%
. . . Sex with Males - IDU	333	12.77%	1.21%
Sub-Total	946	0.37%	3.44%
Males who Have. . .			
. . . Sex with Females	182	0.09%	0.66%
. . . Sex with Females - IDU	1,045	15.62%	3.79%
. . . Sex with Males & Females	3,909	36.12%	14.19%
. . . Sex with Males & Females - IDU*	302	51.19%	1.10%
. . . Sex with Males	15,634	48.16%	56.77%
. . . Sex with Males - IDU	1,208	68.22%	4.39%
Sub-Total	22,280	8.87%	80.90%

Note: The sum of all categories may not add to the total due to rounding.

* Population size for this group is less than 500. Estimated prevalence should be interpreted with caution

Exhibit 3.41
Estimates of HIV Infection Among African Americans
by Behavioral Risk Groups

	Number of HIV Infected	% HIV Infected	% Total SF HIV Distribution
Overall Total	4,349	6.94%	15.79%
Behavioral Risk Groups			
Females who Have. . .			
. . . Sex with Females	3	0.21%	0.01%
. . . Sex with Females - IDU*	15	7.53%	0.05%
. . . Sex with Males & Females	21	1.34%	0.08%
. . . Sex with Males & Females - IDU*	44	20.26%	0.16%
. . . Sex with Males	115	0.42%	0.42%
. . . Sex with Males - IDU	232	20.15%	0.84%
Sub-Total	430	1.35%	1.56%
Males who Have. . .			
. . . Sex with Females	44	0.20%	0.16%
. . . Sex with Females - IDU	637	21.51%	2.31%
. . . Sex with Males & Females	606	44.04%	2.20%
. . . Sex with Males & Females - IDU	Population estimated under 100. Combined with MSM-IDU		
. . . Sex with Males	2,422	58.64%	8.79%
. . . Sex with Males - IDU**	210	70.70%	0.76%
Sub-Total	3,919	12.72%	14.23%

Note: The sum of all categories may not add to the total due to rounding.

* Population size for this group is less than 500. Estimated prevalence should be interpreted with caution

** Includes population estimates from other categories. Estimated prevalence should be interpreted with caution.

Exhibit 3.42
Estimates of HIV Infection Among Asian/Pacific Islanders
By Behavioral Risk Groups

	Number of HIV Infected	% HIV Infected	% Total SF HIV Distribution
Overall Total	2,280	1.29%	8.28%
Behavioral Risk Groups			
Females who Have. . .			
. . . Sex with Females**	1	0.02%	0.00%
. . . Sex with Females - IDU*	Population estimate under 100. Combined with FSF		
. . . Sex with Males & Females	7	0.15%	0.03%
. . . Sex with Males & Females - IDU*	Population estimates under 100. Combined with FSM- IDU.		
. . . Sex with Males	38	0.05%	0.14%
. . . Sex with Males - IDU**	6	2.72%	0.02%
Sub-Total	52	0.06%	0.19%
Males who Have. . .			
. . . Sex with Females	38	0.05%	0.14%
. . . Sex with Females - IDU*	21	4.45%	0.08%
. . . Sex with Males & Females	405	27.98%	1.47%
. . . Sex with Males & Females - IDU*	Population estimates under 100. Combined with MSM-IDU.		
. . . Sex with Males	1,622	37.34%	5.89%
. . . Sex with Males - IDU**	142	44.91%	0.52%
Sub-Total	2,228	2.67%	8.09%

Note: The sum of all categories may not add to the total due to rounding.

* Population size for this group is less than 500. Estimated prevalence should be interpreted with caution

** Includes population estimates from other categories. Estimated prevalence should be interpreted with caution.

Exhibit 3.43
Estimates of HIV Infection Among Latinos/Hispanics
by Behavioral Risk Groups

	Number of HIV Infected	% HIV Infected	% Total SF HIV Distribution
Overall Total	3,841	4.48%	13.95
Behavioral Risk Groups			
Females who Have. . .			
. . . Sex with Females	1	0.05%	0.00%
. . . Sex with Females - IDU**	9	5.73%	0.03%
. . . Sex with Males & Females	11	0.53%	0.04%
. . . Sex with Males & Females - IDU*	Population estimate under 100. Combined with FSF-IDU		
. . . Sex with Males	60	0.16%	0.22%
. . . Sex with Males - IDU*	35	9.73%	0.13%
Sub-Total	116	0.28%	0.42%
Males who Have. . .			
. . . Sex with Females	33	0.09%	0.12%
. . . Sex with Females - IDU	103	10.55%	0.37%
. . . Sex with Males & Females	671	34.40%	2.44%
. . . Sex with Males & Females - IDU*	47	44.18%	0.17%
. . . Sex with Males	2,684	45.87%	9.75%
. . . Sex with Males - IDU*	187	58.59%	0.68%
Sub-Total	3,725	8.47%	13.53%

Note: The sum of all categories may not add to the total due to rounding.

* Population size for this group is less than 500. Estimated prevalence should be interpreted with caution.

** Includes population estimates from other categories. Estimated prevalence should be interpreted with caution.

Exhibit 3.44
Estimates of HIV Infection Among Native Americans
by Behavioral Risk Groups

	Number of HIV Infected	% HIV Infected	% Total SF HIV Distribution
Overall Total	190	8.31%	0.69%
Behavioral Risk Groups			
Females who Have. . .			
. . . Sex with Females**	1	0.88%	0.00%
. . . Sex with Females - IDU	Population estimate under 100. Combined with FSF.		
. . . Sex with Males & Females	Population estimate under 100. Combined with FSF.		
. . . Sex with Males & Females - IDU	Population estimate under 100. Combined with FSF.		
. . . Sex with Males	5	0.51%	0.02%
. . . Sex with Males - IDU			
Sub-Total	6	0.55%	0.02%
Males who Have. . .			
. . . Sex with Females**	12	1.41%	0.04%
. . . Sex with Females - IDU	Population estimate under 100. Combined with MSF.		
. . . Sex with Males & Females	Population estimate under 100. Combined with MSF.		
. . . Sex with Males & Females - IDU	Population estimate under 100. Combined with MSF.		
. . . Sex with Males	172	50.70%	0.62%
. . . Sex with Males - IDU**	Population estimate under 100. Combined with MSF.		
Sub-Total	184	15.46%	0.69%

Note: The sum of all categories may not add to the total due to rounding.

* Population size for this group is less than 500. Estimated prevalence should be interpreted with caution

** Includes population estimates from other categories. Estimated prevalence should be interpreted with caution.

Exhibit 3.45
Estimates of HIV Infection Among Whites
by Behavioral Risk Groups

	Number of HIV Infected	% HIV Infected	% Total SF HIV Distribution
Overall Total	16,882	5.42%	61.30%
Behavioral Risk Groups			
Females who Have. . .			
. . . Sex with Females	8	0.12%	0.03%
. . . Sex with Females - IDU*	8	2.93%	0.03%
. . . Sex with Males & Females	56	0.75%	0.20%
. . . Sex with Males & Females - IDU*	24	8.08%	0.09%
. . . Sex with Males	312	0.23%	1.13%
. . . Sex with Males - IDU	126	8.21%	0.46%
Sub-Total	534	0.35%	1.94%
Males who Have. . .			
. . . Sex with Females	120	0.10%	0.44%
. . . Sex with Females - IDU	418	10.51%	1.52%
. . . Sex with Males & Females	2,917	32.80%	10.59%
. . . Sex with Males & Females - IDU*	245	50.52%	0.89%
. . . Sex with Males	11,670	43.74%	42.38%
. . . Sex with Males - IDU	978	67.17%	3.55%
Sub-Total	16,348	10.25%	59.36%

Note: The sum of all categories may not add to the total due to rounding.

* Population size for this group is less than 500. Estimated prevalence should be interpreted with caution

VII. BEHAVIORAL RISK STUDIES

Methodology and Limitations

Behavioral risk studies provide important information about groups or populations at high risk for contracting HIV. Understanding high-risk sexual and drug use behaviors of diverse populations and identifying the determinants of HIV prevention behaviors are essential components in the development of prevention strategies. This understanding is also necessary for a city-wide prevention plan to redirect priorities to those populations who continue to engage in high-risk behaviors. Ongoing assessment of risk behaviors will be critical in order to identify changes in HIV prevention needs of different populations and to respond to these changes.

In an effort to understand the behavioral risk of diverse populations, recent local (after 1989) published behavioral studies and program-level knowledge, attitudes, beliefs, and behaviors (KABB) studies were collected, reviewed, and summarized for this section of the Epidemiological Profile. It was hoped that this data could be analyzed according to the twelve behavioral risk populations used throughout the Plan. However, data from published research tend not to be organized according to these groups. The research literature tends to report on groups organized by sexual orientation (such as gay and bisexual men), by ethnicity, or by drug-using patterns. While it proved impossible to always fit the findings from research studies into the HPPC-defined behavior risk groups, it was possible to describe findings for clusters of several behavioral risk populations.

Certain behaviors are associated with HIV infection (e.g., type of sexual activity, condom use, number of sexual partners, alcohol and drug use). However, the measurement of these behaviors varies dramatically across studies. Some studies measure the percent of the sample that ever engaged in the risk activity; other studies measure the number of times in the past month (or three months or year or three years, etc.) that the people in the sample engaged in the activity. The lack of standardized measures for assessing specific behavior patterns and the absence of a systematic behavioral surveillance system in San Francisco makes it difficult to compare risk behaviors across studies or across populations. The effects of race, ethnicity, culture, sexual orientation, gender, age, and socioeconomic status on risk behavior activities are difficult to determine in the absence of standard measures of behavior.

The reader should keep in mind an important limitation of behavioral research. Because behavior data are based on self-report, this and other estimates of risk behavior presented in the following summaries are most likely lower than actual levels. The sensitive nature of questions on sexual and drug related behaviors may result in study respondents' underreporting of their behaviors.

In the future it may become somewhat easier to summarize local behavioral studies by behavioral risk populations as the influence and guidance of the HPPC spreads. The HPPC has developed standardized variables to measure risk behavior (see Chapter 9—Strategic Evaluation Plan), and has mandated HIV prevention programs funded by the Department of Public Health (DPH) to conduct a behavioral risk assessment with clients using these common measures.

Further, HPPC guidelines recommend that DPH-funded prevention programs provide information in their proposals about the target populations' risk behaviors (see Chapter 6—Resource Allocation). As more and more community-based organizations turn to behavioral research to guide prevention activities, the need for reliable and consistent standardized measures of risk behaviors is extremely important. Further, with the continued involvement of researchers on the Council, an increasing number of research studies may adopt the categories of behavioral risk groups developed by the Council. Even so, it will be years before the findings from these studies will be available and able to guide prevention planning and program development.

This section summarizes all available current and local published behavioral studies. The information is presented in four sections:

- 1) injection drug users (including all sexual behavioral risk populations);
- 2) adult males who have sex with males (MSM) and males who have sex with males and females (MSM/F);
- 3) adult females who have sex with females (FSF) and females who have sex with females and males (FSF/M); and
- 4) adults males who have sex with females (MSF) and females who have sex with males (MSF).

Following the narrative for each of the four behavioral clusters is a table that contains key information about each study cited (complete bibliographic citations are available in the bibliography at the end of this Plan). Since a substantial amount of published research focuses on specific target groups such as crack users, other non-injection substance users, commercial sex workers, and incarcerated individuals, the summaries include data from these studies within the narrative. Special tables are included for populations who use crack and commercial sex workers (further information about these two groups can also be found in Section IX—Co-factors, in this Chapter).

While the primary categorization of the HPPC is by behavioral risk population, much of the research literature is based on co-variates, particularly age and ethnicity. Therefore, behavioral data have also been summarized in separate sections for youth and specific racial/ethnic groups. While describing risk factors among these groups separately may seem like a divergence from the behavioral risk group model, findings in the literature point to issues worth noting for each of these populations.

Throughout these behavior summaries, the terminology used to describe groups is often that used by the researchers studying a particular population. This is especially apparent in terms of sexual identity versus sexual behavior. While there is a commitment to address the specific behaviors of individuals, a study population may be defined by participants' sexual identity, such as gay, lesbian, bisexual, or heterosexual. While, these identity groups do not always match the sexual behaviors of these of individuals in these groups, study findings are often presented in this way. In addition, terms for various racial and ethnic groups may also vary depending on how they are referred to in specific studies.

STUDIES BY BEHAVIORAL RISK POPULATIONS

Injection Drug Users

High risk behavior among injection drug users (IDUs) and their partners remains one of the primary means of HIV transmission. While sharing injection equipment presents significant opportunity for contracting HIV, local research has shown that targeted interventions have lowered the unsterile needle sharing practices among IDUs in San Francisco (Moss et al., 1994; Watters et al., 1994; Guydish et al., in press). Sexual risk behavior, however, has proven more difficult to change among IDUs and their partners. With low rates of condom and other latex barrier use, high rates of prostitution, and a tendency toward multiple sexual partners, the risk of contracting HIV through unprotected sexual activity remains high among the injection drug using population.

Since much of the literature on injection drug users is presented for the population as a whole, the following summary first describes risk behaviors for the general population of injection drug users. It should be noted that for studies which do not describe differences in the behaviors of specific subgroups, the majority of study participants are male. Next are sections that present behavior summaries specifically for males, for females, and for youth. Information for specific ethnic groups, specific behavioral risk populations, and other target populations is integrated throughout the summaries.

Injection Drug Using Population

Drug Related Risk Behavior of IDUs

Published behavior studies of injection drug users have demonstrated a high risk of contracting HIV through sharing needles and other injection drug paraphernalia. Research conducted with San Francisco IDUs have found rates of needle sharing ranging from 60%-66% in earlier studies (Moss et al., 1994; Watters et al., 1994) and 36%-37% in more recent studies (Watters et al., 1994; Guydish et al., 1995; Guydish et al., in press). Research measuring changes in behaviors related to needle use has shown decreases in risky behavior. A decline in needle sharing among IDUs due to access to needle exchange programs (NEP) in San Francisco was observed in Watters and colleagues' longitudinal research (1994).

While needle sharing has declined, sharing of cookers, cottons, and rinse water is prevalent among IDUs. Guydish et al. (in press) found that while more than one-third (36%) of needle exchange participants reported sharing needles during the past thirty days, over half (54%) shared cookers, more than one-third (38%) shared cottons, and 41% shared rinse water in the past month. This evaluation found that the more needles clients received from the NEP, the less likely they were to share needles or rinse water.

Ethnic differences in needle sharing were found among IDUs in San Francisco, with African Americans less likely to share syringes than Whites or Latinos (Watters et al., 1994; Kral et al., 1996a; Kral et al., 1996b).

The use of crack among IDUs poses a significant additional risk for HIV infection. The association between crack use and HIV seroprevalence and risk behaviors is described in the co-factors section of this chapter. Wolfe et al. (1992) found that nearly one fourth (23%) of a sample of IDUs in treatment reported crack use. This percentage was even higher among African Americans in the sample, 47% of whom used crack.

Sexual Behavior of IDUs

Most studies assessing risk factors for HIV among IDUs have found that in addition to risk for contracting HIV through injection behavior, another risk factor for this population in San Francisco is high risk sexual behavior. Risky sexual behavior has proven more resistant to change than risky injection practices. Among sexually active IDUs, regular condom use is uncommon. A study of heterosexual male and female IDUs in San Francisco found that more than two-thirds never used condoms (Lewis & Watters, 1991). Similarly, well over half (59%) of sexually active needle exchange clients report no condom use during the past 30 days (Guydish et al., in press).

Having multiple sexual partners and exchanging sex for drugs or money are also common risk behaviors among IDUs. However, these acts do not necessarily lead to HIV transmission if protection is consistently used. While this population does not consistently use condoms or other barriers, research has found that IDUs with greater than 10 sexual partners and those engaging in prostitution were more likely to use condoms (Lewis & Watters, 1991), thus reducing this risk.

Male Injection Drug Users

Drug Related Risk Behavior of Male IDUs

Information on injection and other drug-related high risk behaviors exclusively for male IDUs was not found in the literature. As described above, most information on drug-related risk behaviors describes a largely male population. Thus, it can be assumed that male IDUs follow behavioral patterns similar to those found in the summary above.

A behavior study of Latino and Filipino MSM and MSM/F found that while less than 10% admitted to injection drug use, the majority of those did not know how to disinfect a needle in order to kill the AIDS virus (Fairbanks, Bregman & Maulin, Inc, 1991).

Sexual Risk Behavior of Male IDUs

Many studies have documented high rates of sexual risk taking among male IDUs, as well as variations in this behavior by sexual orientation and ethnicity. References to high prevalence of multiple sex partners in this population appears throughout the literature. A study of male IDUs in San Francisco (Lewis & Watters, 1994) found that fewer than half (47%) were monogamous during the prior six months. Other research has found that 15% of male IDUs

reported 10 or more sexual partners during the previous year (Lewis & Watters, 1991). The 1994 study also found that men who were behaviorally bisexual or homosexual were more likely than heterosexuals to report multiple partners (Lewis & Watters, 1994).

Exchanging sex for drugs or money can pose increased risk of exposure to HIV among injection drug users. Lewis and Watters (1991) found that more than one-fourth (26%) of male IDUs engaged in prostitution; this was more common among African-American men (34%) than among White men (18%). In a later study, these authors found that prostitution varied significantly by sexual orientation as well; more than three-fourths (77%) of self-identified homosexual IDUs and over half (56%) of self-identified bisexual IDUs reported prostitution, compared to 18% of self-identified heterosexuals (Lewis & Watters, 1994).

Rates of condom use among male IDUs also vary by sexual orientation, although for this behavior men who have sex with women exhibit the riskier behavior. One study reported that 73% of men said they never use condoms, but men with male sexual partners were more likely to use them than those with only female partners (Lewis & Watters, 1991). Similar findings were reported in a more recent San Francisco study which found that over half (56%) of male IDUs who have sex with women never use condoms during vaginal intercourse, while only one-third (32%) of male IDUs who have sex with men reported that they never use condoms during anal sex. Men reporting sexual partners of both sexes fell somewhere in between, with 41% reporting no condom use during vaginal sex, and 52% reporting no condom use during anal sex with men or women (Lewis & Watters, 1994). Variation by ethnicity in condom use was observed in a national study of street-recruited IDUs. This study found that men of Mexican origin were less likely to use condoms than other ethnic groups (Friedman et al., 1993).

Female Injection Drug Users

Drug Related Behavior of Female IDUs

Few studies have examined female injection drug users' syringe sharing behaviors, although there are some indications that women may be more likely to share their injection equipment than men. One national study of drug-using women who have sex with women found that over half (53%) of the sample of IDUs shared syringes during past thirty days, and two-thirds (66%) reported sharing other injection supplies (Kral et al., 1996b). According to National AIDS Demonstration Research Project (NADR) data analysis, female IDUs (FSF and FSF/M) who reported any sex with women were more likely to report factors that put them at higher risk for HIV than women not having sex with other women—drug use, engaging in high risk drug behaviors, and exchanging sex for drugs (Samuel Friedman's analysis of NADR data, cited in Young et al., 1993).

In a 1993 study of lesbian and bisexual women in San Francisco and Berkeley, 4% of the sample reported injection drug use in the past three years. Among the 10% who reported injection drug use since 1978, 71% reported a history of sharing needles and 31% reported sharing needles with gay or bisexual men (Lemp et al., 1995). In a larger East Coast study, 3%

reported needle sharing since 1978. African American were significantly more likely to report needle sharing than White women (8% v. 2%) (Einhorn and Polgar, 1994).

Other research has suggested that women in the sex industry demonstrate riskier needle-related behavior. Women who trade sex for money and/or drugs were found to be less likely than women who had no history of commercial sex to use new needles on a consistent basis or to clean used needles. They were more likely to share with others compared to women not engaging in commercial sex (Kail et al., 1995).

The use of other drugs, particularly crack cocaine, among the injection drug using population further increases risk for HIV. Two studies found that well over half of injection drug using women use crack (Wolfe et al., 1992; Kral et al., 1996b). In addition, research has found that women are more likely to use crack than men, and African American women are the group most likely to use crack (Watters et al., in press).

Sexual Risk Behavior of Female IDUs

Clearly, the high prevalence of sexual risk behavior poses a serious risk of transmission of HIV for women using injection drugs. Among IDU women who have sex with men, engaging in unprotected vaginal intercourse increases the likelihood of becoming HIV-infected. A national study of street-recruited IDUs found that women averaged 21 to 26 episodes of unprotected vaginal sex per month (Friedman et al., 1993). Lewis and Watters (1991) found that three-fifths (61%) of injection drug using women reported never using condoms. More recent research found that condom use varied by HIV status and whether women had steady partners. Watters et al. (1994) found that 44% of HIV-negative women and 13% of HIV-positive women reported never using condoms. These proportions increased for women with steady partners; 79% of HIV-negative and 41% of HIV-positive female IDUs with steady partners never use condoms. Another study found that female drug injectors of Mexican origin were less likely to use condoms than other ethnic groups (Friedman et al., 1993).

Engaging in sex with multiple partners is also common among injecting drug-using women. Nearly one-fourth (23%) of women in a sample of San Francisco IDUs reported ten or more sexual partners in the past year. This rate was higher for White women (30%) compared to African American women (14%) (Lewis & Watters, 1991).

Injection drug-using women who have sex with women are at risk for HIV due primarily to drug using practices. Among injection drug-using women who have sex with women and women who have sex with women and men in a national study, half of the women reported having vaginal sex with a man during past 30 days, and 70% of those reported inconsistent condom use. Eleven percent reported anal sex with men, and 74% of those reported having unprotected anal sex. Almost all (93%) reported unprotected oral sex with women. In addition, more than one-third (38%) of this study sample reported trading sex for drugs, and 16% reported multiple female partners (Kral et al., 1996b).

Published studies describe varying rates of commercial sex among female IDUs; findings range from 15% to 50% of the studied group who report exchanging sex for money, drugs or other needs (Moss et al., 1994; Wolfe et al., 1992; Lewis & Watters, 1991). The use of crack further increases the likelihood that a female IDU will engage in commercial sex. Wolfe et al. (1992) found that female IDUs who also used crack were more likely to trade sex for drugs or money (30%) than non-crack using IDUs (19%). In addition, ethnic differences were observed in one study where 58% of African-American women reported trading sex for drugs, compared to 43% of White women (Lewis and Watters, 1991).

Non-injecting partners of IDUs have also been found to be at high risk for HIV. In a study of male IDUs reporting steady female partners, nearly three-fourths (73%) of the men reported never using condoms, both with their primary female partners and during anal sex with other male or female partners (Lewis et al., 1990). Female partners of IDUs may be at higher risk and less likely to change behaviors due to lack of perceived risk, as many may be unaware that their partners use injection drugs (Corby, et al., 1991). Nearly all (95%) of the women in Corby and colleagues' study of partners of IDUs in Long Beach reported unprotected vaginal sex in the previous six months; 20% traded sex for money or drugs and 45% were crack users. In addition, this study found that African American women were more likely to engage in these behaviors than White or Latina women.

Risk Behavior of Injection Drug Using Youth

Youth who inject drugs may engage in riskier behaviors than adult injection drug users, particularly with regard to needle sharing. In a San Francisco subsample of the Young Injectors Study (Institute for Health Policy Studies, 1996), more than two-thirds (69%) of injection drug-using youth reportedly shared needles during the past 30 days, with a median of two sharing episodes.

Among San Francisco youth populations, the rate of injection drug use behavior is highest for runaway and homeless youth. In a recent study by Clements et al. (in press) reporting on the risk behaviors of street youth ages 12 to 24 recruited from street-based settings in four Northern California cities, 32% reported ever injecting drugs. Of these, 47% report current injection drug use, 66% of whom reported sharing cottons, cookers, or water and 65% of whom reported sharing needles or syringes. In a multi-site study of runaway, homeless youth under the age of 19 years recruited from street (35%) and agency (65%) settings in San Francisco, Denver, and New York City, Kral and colleagues (in press) found that 21% of the overall sample had ever injected drugs and 15% currently do so. Of these youth, 62% recently shared needles. Importantly, Kral et al. also found that lifetime injection drug use was highest among the San Francisco sub-sample (43% vs. 21% overall) as well as current injection drug use (35% vs. 15% overall).

As with adults, trading sex for drugs or money is also common among youth who inject drugs. More than one-third (36%) of street-recruited injection drug using youth reported ever exchanging sex for money or drugs (Institute for Health Policy Studies, 1996). Exhibit 3.46 contains a summary of the behavioral studies described above.

Exhibit 3.46

Summary of Behavioral Studies Injection Drug Users (All Sexual Behavioral Risk Populations)			
Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Corby et al. (1991)	KABB study of 137 female sex partners of male IDUs. Participants were recruited in Long Beach CA. Data Collected 1998-1990.	<ul style="list-style-type: none"> • 95% reported engaging in unprotected vaginal sex in the past 6 months • 7% reported unprotected anal sex • 20% reported that they had engaged in prostitution in the past 6 months • 39% had history of STDs • 67% had only one sexual partner in the past six months • Condom use was less frequent w/ primary partners • Most frequent reasons for not using condoms were 1) the belief that a male partner would object to condom use and 2) personal dislike of condoms 	<ul style="list-style-type: none"> • 67% used non-injection drugs • 45% used crack • 32% reported prior use of injection drugs (56% of whites, 31% of Latinas, and 24% of African Americans) • 20% reported daily alcohol use • 20% were or had previously been in drug treatment
Friedman et al. (1993)	Data from approx. 12,000 street-recruited drug injectors in 19 cities were analyzed to determine racial differences in sexual risk for HIV transmission. No Date Given	<ul style="list-style-type: none"> • All racial/gender groups averaged 15 or more episodes of unprotected vaginal sex per month; 10% of most groups reported having anal sex in the past 6 months 	

**Summary of Behavioral Studies
Injection Drug Users (All Sexual Behavioral Risk Populations)**

Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Guydish et al. (in press)	Description of demographic and drug use characteristics, health status, and HIV risk behavior among 114 clients of SF needle exchanges in Tenderloin, Mission, Polk, and Western Addition. Data Collected October 1992	<ul style="list-style-type: none"> • 22% reported having 2 or more sexual partners in past 30 days • 11% reported exchanging sex for money, drugs, etc. • 59% of sexually active clients report no condom use 	<ul style="list-style-type: none"> • 69% reported injecting more than one drug in past month • Mean injection frequency: 60.8 per month • 36% reported sharing needles • Mean needle sharing episodes among those who shared: 25.1 per month • Clients receiving more needles from NEP were less likely to share needles or rinse water
Guydish et al. (1995)	Demographic and drug use characteristics and HIV risk behavior of 50 IDUs using SF needle exchanges in Mission and Tenderloin areas. Evaluation of this program is also discussed in this article. Data Collected December 1990	<ul style="list-style-type: none"> • 22% reported using condoms more often since participating in the NEP 	<ul style="list-style-type: none"> • In previous 30 days, most frequently injected drug heroin 68% amphetamines 24% cocaine 6% • 54% had injected more than one drug in the past 30 days • 37% reported needle sharing in the past 30 days • Among needle sharers, median number of sharing episodes in past 30 days was 13.5; 59% reported some bleach use; 35% reported always using bleach • Mean number of injections in past 30 days: 79.4 • Impact of NEP: 40% reported cleaning needles more often

Summary of Behavioral Studies Injection Drug Users (All Sexual Behavioral Risk Populations)			
Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Institute for Health Policy Studies. (8/28/96)	The Young Injectors Study: San Francisco subsample. Demographics, drug use and HIV risk behaviors of 81 15-23 year old IDUs who do and do not use needle exchange. No Date Given 86% White 67% Heterosexual 90% Homeless	<ul style="list-style-type: none"> • 36% reported ever exchanging sex for money, drugs, etc. 	<ul style="list-style-type: none"> • 51% injected daily • 36% injected at least weekly • Drug most often injected: Heroin 52% Speed 42% Speedball 6% • 69% shared needles in past 30 days; of those, mean number of needle sharing occasions in past 30 days: 9.3 (median = 2) • 47% report inconsistent bleaching when sharing with main injecting partner • 40% report inconsistent bleaching with other partner
Kail et al. (1995)	Analysis of 9,055 drug-addicted women not in treatment to identify needle using practices of women in the sex industry. No Date Given		Women who trade sex for money and/or drugs are less likely to use new needles on a consistent basis or to clean used needles. They are more likely to share with others compared to women not engaging in commercial sex.
Kral et al. (1996a)	Injection-related risk behavior among 995 street-recruited IDUs in Oakland and Richmond; Sample was 72% African American Data Collected 1992		<ul style="list-style-type: none"> • 43% reported sharing syringes in past 30 days • 54% reported sharing other injection supplies in past 30 days • African Americans were less likely to share syringes than other ethnicities (36% v. 60%)

Summary of Behavioral Studies Injection Drug Users (All Sexual Behavioral Risk Populations)			
Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Kral et al. (1996b)	HIV-related risk behavior of 231 drug-using women (119 IDU) who have sex with women and women who have sex with women and men in 19 cities. Sample was 57% African American. Data Collected 1992	<ul style="list-style-type: none"> • 62% had a history of sex work • 21% had multiple female partners in past 30 days • 7% used barrier protection during oral sex with women • 50% also had sex with men in past 30 days • 30% of those who had vaginal sex with men always used condoms • 26% of those engaging in anal sex always used condoms • Crack users were more likely than IDUs to have had multiple female sex partners (27% v. 16%) and to have traded sex for drugs (58% v. 38%) 	<ul style="list-style-type: none"> • 53% of IDU women had shared syringes in past 30 days • Crack users were more likely to have drunk alcohol in past 48 hours (72% v. 46%)

Summary of Behavioral Studies			
Injection Drug Users (All Sexual Behavioral Risk Populations)			
Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Lewis et al. (1991)	Cross-sectional study of 457 heterosexual IDUs recruited from 21-day detox programs and street-based sites looking at ethnic and gender variations in sexual risk behaviors. Data Collected 1987	<ul style="list-style-type: none"> • 65% of respondents had 2 or more partners in past year • 22% of Whites and 14% of African Americans reported 10 or more partners • Women were more likely than men to report 10 or more partners (23% v. 15%) • 15% of all respondents reported same sex partners in past year • 35% reported prostitution in the past year • African Americans and women were more likely to report exchanging sex for money • Whites and women were more likely to have a consistently stable partner who injected drugs • 73% of men and 61% of women said they never used condoms 	

Summary of Behavioral Studies
Injection Drug Users (All Sexual Behavioral Risk Populations)

Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Lewis et al. (1994)	<p>Survey of 396 male drug users contacted in three street settings and two drug treatment programs.</p> <p>Ethnicity: 45% Af-Am 17% Latino/a 34% White 4% other</p> <p>Sexual Orientation: 76% heterosexual 12% bisexual 12% homosexual</p> <p>Data Collected 1989</p>	<ul style="list-style-type: none"> • 47% were monogamous in the past 6 months • Bisexuals and homosexuals were more likely than heterosexuals to report two or more sexual partners • 47% of heterosexuals, 42% of bisexuals and 36% of homosexuals with multiple partners reported never using condoms • Men who exchange money or drugs for sex reported similar rates of never using condoms • Gay or bisexual men were most likely to state they made substantial changes in their behavior to lower their risk of infection (however, reported condom use in past 6 months was still low) • 77% of homosexuals, 56% of bisexuals and 18% of heterosexuals reported prostitution 	<ul style="list-style-type: none"> • All were IDUs, but this article concentrated on sexual behaviors
Lewis et al. (1990)	<p>Study of 149 male IDUs in treatment and street settings who had steady female partners. Data Collected 1987</p>	<ul style="list-style-type: none"> • 83% reported more than one female sexual partner in the past 5 yrs; 60% had 5 or more; 39% had 10 or more • 15% reported sexual contact with a male • Heterosexual anal sex was reported by 38% • 73% never used condoms 	

Summary of Behavioral Studies
Injection Drug Users (All Sexual Behavioral Risk Populations)

Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Moss et al. (1994)	Examined HIV seroconversion, risk factors for seroconversion and changes in risk behavior in 2,351 heterosexual IDUs from all methadone maintenance and 21-day detox programs in San Francisco. Data Collected 1985-1990	<ul style="list-style-type: none"> • Proportion of IDUs with only one or no sexual partners in the past year increased from 40% to 67% • Proportion of women who reported being paid for sex fell from 32% to 15% 	<ul style="list-style-type: none"> • Among those who reported sharing needles, use of bleach increased from 31% in 1986 to 75% in 1990, and the proportion sharing with more than one person fell from 51% to 34% • Proportion who reported sharing with 2 or more people without bleach fell from 26% to 6% • IV cocaine use fell from 40% to 15% • IV amphetamine use declined from 13% to 4%, • Heroin use increased steadily • Data on crack use were obtained only from 1988 to 1990. Has stayed between 20% and 24%
Watters et al. (1991)	<ul style="list-style-type: none"> • Cross-sectional interview survey of 623 IDUs recruited from 3 street locations and drug detox clinics. No Date Given		<ul style="list-style-type: none"> • There was a tendency to inject more than one drug • Two groups of drug injection profiles were created with different rates of HIV infection (17% for the higher and 9.8% for the lower) • In multivariate analysis only age (younger than 30 yrs) and race (African American) contributed to likelihood of HIV infection

Summary of Behavioral Studies Injection Drug Users (All Sexual Behavioral Risk Populations)			
Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Watters et al. (1994)	Urban Health Study survey of IDUs in 3 inner-city communities and two drug detoxification clinics. Data Collected December 1986 and June 1992.	None reported	<ul style="list-style-type: none"> • Decline in sharing behavior from 66% to 36% • Increase in syringe exchange as a usual source of syringes • Decrease in the median number of daily injections in the year prior to interview (from 1.9 per day to .7 per day) • Significant decline in persons who reported first injecting drugs in the previous year (3% to 1.1%)
Watters et al. (1994)	Risk analysis of 407 survey questionnaires and matched HIV serologies from female IDUs recruited from community settings in SF. Data Collected 1991 and 1992.	<ul style="list-style-type: none"> • 81% reported vaginal intercourse in the previous six months • Frequent users of cocaine had greater numbers of sexual partners and more frequent incidence of vaginal intercourse • 44% of HIV seronegative women and 13% of HIV seropositive women reported never using condoms • 79% of HIV seronegative and 41% of HIV seropositive women with a steady partner reported never using condoms • 22% of HIV seronegative women reported the objection of their sexual partner as the main reason for not using condoms during sex with their primary partner 	<ul style="list-style-type: none"> • Crack smokers were less likely to report enrollment in drug treatment and a use of needle exchange • 54% reported using crack cocaine in past 30 days • Recent crack smoking was more prevalent among African American women • Crack smokers were more likely to report illegal activity as their major source of current income, homelessness, ever being pregnant, a history of gonorrhea, multiple sex partners in the past six months, and ever receiving money or drugs for sex • Of the 230 women who reported having a current male steady sexual partner, crack smokers were more likely to have a non-IDU partner

Summary of Behavioral Studies
Injection Drug Users (All Sexual Behavioral Risk Populations)

Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Watters et al. (1990)	Survey on behavior change associated with street-based AIDS education was evaluated in two cross-sections sampled from drug detox clinics and street locations. Data Collected 1986 (n=438) and 1987 (n=623).	<ul style="list-style-type: none"> In 1986, 22% of the participants reported using condoms, but only 4.3% used them at least half of the time. In 1987, 32.7% reported using condoms and 18.6% reported using them at least half of the time 	<ul style="list-style-type: none"> In 1986, 30% reported cleaning their needles the correct way, and in 1987 63% reported doing so In 1986, 9.8% reported not sharing needles, and in 1987 21% reported this
Wolfe et al. (1992)	Interviews examining crack use and HIV risk behavior of 1,281 heterosexual IDUs recruited from heroin treatment programs in San Francisco. Data Collected 1988 and 1990.	<ul style="list-style-type: none"> Crack users were more likely to report 6 or more sex partners in past year (15% v. 9%) Female crack users were more likely than other women to report having received payment for sex (30% v. 19%) 	<ul style="list-style-type: none"> 23% reported using crack in the past 30 days Women were more likely to report crack use than men and they used it more heavily Crack use was more prevalent among African Americans (47% v. 14.5%) 58% of African American women reported crack use IV cocaine use was more frequent among crack users (35% v. 20%) Crack users were significantly more likely to report injecting in shooting galleries in past year
Woods et al. (in press)	Cross-sectional review of records of 3,905 IDUs who were first admitted to publicly-funded treatment centers. Records were analyzed to determine correlates of needle sharing. Data Collected July 1988 to June 1989		<ul style="list-style-type: none"> Overall, 25% of respondents reported sharing needles in the past 30 days 93% reported heroin as their primary drug 33% reported any type of cocaine use

Males who have Sex with Males (MSM) and Males who have Sex with Males and Females (MSM/F)

HIV prevention has had an impact on the risk behaviors of males who have sex with males (MSM) and males who have sex with males and females (MSM/F). Several longitudinal studies in San Francisco document the initiation of safer sexual behaviors among MSM and MSM/F who received prevention information early in the AIDS epidemic (Catania et al., 1991; Doll et al., 1990; McKusick et al., 1990; Stall et al., 1990). However, recent studies indicate that a significant proportion of MSM and MSM/F populations either continue to engage in high-risk behaviors or have relapsed from a commitment to safer sex back to high-risk sex. Additionally, young men and others initiating same-sex sexual behaviors may not have the information, skills, or motivation required to incorporate safer sex techniques into their sexual repertoire. These factors highlight the need for continued and dynamic prevention efforts, particularly since elevated HIV seroprevalence and incidence rates among these populations suggest a higher probability of transmission with each unsafe sexual act.

While unsafe sexual behaviors remain a threat to the health of MSM and MSM/F populations, unsafe injection drug use and non-injection drug- and alcohol-related behaviors contribute to their overall risk for HIV infection. Injection drug use among MSM and MSM/F populations presents a direct route for HIV transmission. Alcohol and other non-injection drug use is known to promote higher risk sexual behavior (Ostrow et al., 1994), suggesting that prevention efforts will only effectively modify these sexual risk behaviors when substance use issues are concurrently addressed.

Issues of community identification can further complicate the design and provision of effective prevention interventions. Prevention interventions targeting self-identified members of the gay and bisexual communities may not reach others who engage in same-sex behavior but do not identify with these communities. This issue may affect proportionately higher numbers of men of color who identify primarily with their racial/ethnic community rather than the gay and bisexual communities (Doll et al., 1991). Prevention strategies that do not reflect the values, culture, and beliefs of the target population are unlikely to affect behavior change.

Factors that predict MSM and MSM/F populations' engagement in risky behavior have been extensively explored. These factors are most extensively discussed in the section on co-factors. This summary focuses on the prevalence of risky sexual and drug use behaviors among MSM and MSM/F populations, but also includes information on special sub-populations at particular risk, such as people who use poppers and those in drug treatment. The majority of studies with MSM populations include individuals whose sexual behavior may include sex with females (MSM/F), and refer to their study sample as "gay and bisexual men." Results from these studies cannot always be disaggregated between the MSM and MSM/F proportions of the study sample. Some studies that have focused solely on MSM/F populations are discussed separately, while aggregated results from studies that include both MSM and MSM/F populations are interwoven throughout this summary.

Sexual Risk Behaviors of Males who have Sex with Males

Unprotected anal intercourse is the highest sexual risk behavior for HIV transmission. Eighteen percent (18%) of gay- and bisexually-identified men surveyed as part of the 1989 Fifth Population-Based Survey (Communication Technologies, Inc., 1990) reported having had unprotected anal intercourse over the past year. The same study reported that approximately 30% engaged in one or more of the following risk behaviors: unprotected anal intercourse, oral-to-anal contact, manual-anal contact (fisting), or oral sex with semen exchange in the past 30 days. A study sampling gay- and bisexually-identified men who accessed STD-related services from San Francisco's City Clinic found much higher prevalence—69% of the overall sample reported unprotected anal intercourse in last four months, with a median of 6 episodes—although this population is likely at higher risk than the general MSM and MSM/F populations given that they were accessed at an STD clinic (Doll et al., 1991). In general, this study found that men who reported higher frequency of anal intercourse also reported lower condom use rates during anal sex.

Studies focusing the MSM and MSM/F populations' change of condom use over time provide another perspective on the prevalence of unsafe sexual behaviors among this group. While most of these studies were conducted between 1985 and 1990, they indicate initial behavior change among the general San Francisco MSM and MSM/F population. In the AIDS Behavioral Research Project (Stall et al., 1990), a large sample of San Francisco MSM and MSM/F who were followed consistently from 1984 to 1988 demonstrated a 76% decline in unprotected anal intercourse. Similarly, Catania and colleagues (1991) found an increase in condom use from 10% always using condoms in 1984 to 40% in 1988.

Other studies have specifically investigated factors that might predict increases in condom use, such as partner/relationship type and knowledge of partner's HIV serostatus, among MSM and MSM/F populations. The AIDS Behavioral Research Project followed a cohort of predominantly White (91%) gay and bisexual men in committed relationships or who did not patronize bars or baths in San Francisco between 1983 and 1988 (McKusick et al., 1990). This study found that monogamous men were more likely than nonmonogamous men at both study points to practice unprotected anal intercourse, but the proportion of these men engaging in unprotected anal intercourse decreased from 71% in 1984 to 27% in 1988. Among non-monogamous men, the proportion engaging in unprotected anal intercourse decreased from 50% in 1984 to 12% in 1988. The San Francisco City Clinic cohort of predominantly White (94%) self-identified gay and bisexual men compared risk behaviors of men who were aware and unaware of their HIV status. This study found that seropositive men had higher baseline risk indices (receptive anal intercourse) than seronegative men, regardless of whether they knew their HIV status. However, both groups demonstrated reductions in high-risk sexual behaviors from 1983 to 1987, regardless of whether they learned their HIV status (Doll et al., 1990).

The prevalence of unsafe sexual behavior within different ethnic groups has been demonstrated in several studies. Among self-identified gay and bisexual men in the African American Men's Health Study (Peterson et al., 1992), 22% had unprotected anal sex (19% with ejaculation) with their primary partners, and 35% had unprotected anal sex (30% with

ejaculation) with their other partners in the six months prior to study participation. The authors also note that the overall proportion having unprotected anal intercourse in the past six months was higher than the proportion reported for gay and bisexual White men (52% compared to 15-20%). In an evaluation of a risk reduction intervention for African American MSM and MSM/F, Peterson and colleagues (1996) report baseline rates of unprotected anal intercourse ranging from 26% (in the control group) to 46% (in the group receiving three prevention sessions) of study participants. Following the intervention, unprotected anal sex among participants receiving three sessions was reduced from 46% to 20% after 12 months, and 45% to 20% after 18 months, while unprotected anal sex was reduced among those receiving a single session only slightly and remained constant among controls receiving no intervention.

In a recent evaluation of a brief group counseling intervention with self-identified gay Asian and Pacific Islander men in San Francisco, Choi and colleagues (1996) found that the mean number of sexual partners in the three months prior to study participation was 3.9, and 28% of the sample engaged in unprotected anal intercourse. Following counseling, the number of sex partners decreased by 46% and Chinese and Filipino men reduced the amount of unprotected anal sex they reported (Choi et al., 1996).

In a study conducted for the San Francisco Department of Public Health's AIDS Office, Fairbanks, Bregman, and Maulin, Inc. (1991) surveyed San Francisco's American-Indian, Filipino, and Latino gay and bisexual male communities. By ethnicity, the proportion of men reporting unprotected anal intercourse with a male partner during previous 12 months was 20% for American Indian, 34% for Filipino, and 47% for Latino respondents. Additionally, they found that 68% of American Indians and Filipinos have difficulty talking about condoms with their sexual partners. Forty-six percent (46%) of Latinos in the study said that condoms are not necessary when they only had one partner.

The sexual risk behaviors of young MSM and MSM/F populations in San Francisco have been recently monitored and are well documented. San Francisco Department of Public Health Young Men's Studies have been conducted in San Francisco and Berkeley with 17- to 22-year-old MSM and MSM/F populations (Lemp et al., 1994; Young Men's Survey 2, 1996) and San Francisco, Alameda, and Santa Clara Counties with 17 to 22 year old MSM and MSM/F populations (San Francisco DPH et al., 1996; Young Men's Survey 3, 1996 with results restricted to San Francisco 17 to 22 year olds). These studies have found that 31% to 36% of these young MSM and MSM/F had unprotected anal intercourse during the six months prior to being interviewed. Disaggregated by ethnicity, 36% to 40% of Latino, 28% to 32% of White, 26% to 39% of African American, 23% to 27% of Asian and Pacific Islander, and 39% to 45% of respondents of other ethnicities reported recent unprotected anal intercourse. Prevalence of unprotected anal intercourse was also differentiated by other factors such as partner type (44% with primary partners v. 28% with other partners), age (29% for 17 to 19 year olds v. 34% for 20 to 22 year olds), history of forced sex (41% for those with v. 27% for those without such a history), and peer norms regarding safe sex (46% for those with negative v. 23% for those with positive peer norms) (Lemp et al., 1994).

The San Francisco Young Men's Health Study sampled a slightly older (18 to 29 years) cohort of MSM and MSM/F populations in San Francisco and Berkeley (Osmond et al., 1994). Of the 63% of participants who reported having receptive anal intercourse with at least one partner in the past 12 months, 41% reported inconsistent condom use. Differences in proportions engaging in unprotected anal intercourse by partner type were found; 44% had unprotected anal intercourse with primary partners compared to 28% with other partners.

Changes in risk behaviors of young (under 25 years) African American MSM and MSM/F in San Francisco were recently studied through the San Francisco Stop AIDS Project by Gage (1995). Of the 69% reporting any anal intercourse in 1992-3 during the six months prior to study participation, 29% did not use condoms. The proportions found in the 1993-5 assessment indicate a decrease in prevalence of anal sex, but also an increase in the absence of protection: of the 55% reporting anal intercourse during the six months prior to study participation, 37% did not use protection. This study further reported that of those having anal intercourse at the 1993-5 assessment, men 19 years old and younger were more likely to have unprotected anal intercourse (30%) than men between the ages of 20 and 25 years (14%).

Sexual Risk Behavior of Males who have Sex with Males and Females

Most studies consider both males who have sex with males and males who have sex with males and females together and present the findings without distinguishing between the two behavioral risk populations. However, the few studies that have analyzed findings from the subsample of males who have sex with males and females indicate that they engage in unsafe sexual behaviors with both their male and female sexual partners. Ekstrand and colleagues (1994) looked at the MSM/F subsample of the San Francisco Men's Health Study longitudinal cohort. The purpose of this study was to measure changes in the proportion of the sample engaging in unprotected sex between 1984-5 and 1988-9; therefore, percentages are provided for both time periods. In terms of the sex of their sexual partners, the study found that 65% in 1984-5 and 70% in 1988-9 had sex with men only, 6% and 10% had sex with women only, 26% and 7% had sex with men and women, and 5% and 13% were celibate. Specific unsafe sexual acts in the past year were also reported. Of those who had sex with female partners, 13% in 1984-5 and 3% in 1988-9 had unprotected vaginal sex with multiple female partners, and 4% and 1% had unprotected anal sex with multiple female partners. Seventy percent in 1984-5 and 12% in 1988-9 had unprotected anal sex with multiple male partners while 16% and 2% had unprotected anal sex with men and unprotected vaginal sex with women.

Relapse Issues

HIV prevention researchers have given considerable attention to the issue of relapse regarding sexual behaviors, debating whether it is realistic to expect that once people become skilled at safer sex techniques they practice them every time they have sex (Davies, 1993; Donovan et al., 1994; Ekstrand et al., 1993). Studies among MSM and MSM/F populations that have focused on the issue of relapse place emphasis on maintenance of safer sexual behaviors as the primary means of avoiding new infections. Stall and colleagues (1990) report that in a longitudinal study of MSM populations in San Francisco, 69% of study participants with whom

they conducted follow-up surveys in 1988 relapsed from a commitment to and practice of safer sexual behaviors to a return to consistent unsafe behaviors. The Fifth Population-Based Survey found a much smaller proportion; 16% of respondents were classified as “relapsers,” i.e., men who made a commitment to never practice unprotected anal sex but had unprotected anal sex in the year prior to study participation (Communication Technologies, Inc., 1990). Disparate findings such as these may be related to differences in study measures and definitions of “relapse.”

Multiple Partner Issues

Sex with multiple partners is another factor that may contribute to HIV risk for MSM and MSM/F populations. Among self-identified gay and bisexual men representing a San Francisco sub-sample of a multi-site STD clinic study, 51% reported having a primary partner, but just 12% had only one partner during the previous four months (Doll et al., 1991). The median number of other partners for this sample was three, and the median number of primary partners was one. In the San Francisco Young Men’s Health Study, Osmond et al. (1994) report that of their sample of gay and bisexual men age 18 to 29 years, 38% had two or more receptive anal intercourse partners in the past year. An extensive review of the literature regarding how sex with multiple partners increases risk for HIV infection is provided in the co-factors section of this chapter.

Drug- and Alcohol-Related Risk Behavior of Males who have Sex with Males and MSM/F

MSM and MSM/F populations who inject drugs are at the highest risk of all the behavioral risk populations as ranked in the HPPC priority-setting matrix, because they may engage in two behaviors that present infectious opportunity (i.e., needle sharing and unprotected sex). A study of predominately White self-identified gay and bisexual men sampled in an STD clinic found that 17% of this MSM and MSM/F population currently inject drugs (Doll et al., 1991). According to the Fifth Population-Based Survey conducted by Communication Technologies, Inc. (1990), 10% of predominately White gay and bisexual men have injected drugs at some point in their lives. The proportion of African American gay men in the African American Men’s Health Study who ever injected drugs was higher (25%) than that reported for the predominately White samples (Peterson et al., 1992). This contrasts sharply with the small proportion (2%) who reported injecting cocaine, speed, or some other amphetamine in the Fairbanks, Bregman, and Maulin, Inc. (1991) study conducted for the San Francisco Department of Public Health’s AIDS Office of San Francisco’s American-Indian, Filipino, and Latino gay and bisexual communities.

Study findings of the proportion of young MSM and MSM/F populations in San Francisco and the Bay Area who inject drugs are relatively consistent. Reports of lifetime injection drug use behavior range from 8% (San Francisco DPH et al., 1996) to 17% (Lemp et al., 1994); of those in the Lemp and colleagues study, 14% had shared needles or works that had not been cleaned with bleach or alcohol. Current injection drug use (within the past six months) among these populations has been found to be between 5% (San Francisco DPH et al., 1996) and 12% (Lemp et al., 1994). Data from the San Francisco and Berkeley Young Men’s Survey of

17- to 22-year-old MSM and MSM/F populations suggest differences by ethnicity: 25% of Native American, 16% of White, 10% of African American, 8% of Latino, 0% of Asian and Pacific Islander, and 13% of respondents of other races reported ever having injected drugs (Lemp et al., 1994). Of the Osmond et al. (1994) sample of MSM and MSM/F populations between the ages of 18 and 29 years, 61% reported having shared injection equipment.

Non-injection drug use, particularly in combination with sexual behaviors, is known to contribute to the likelihood of unsafe sex (Ostrow et al., 1994; Woody et al., 1996), thus increasing the chances of HIV transmission. Although the issue of non-injection alcohol and drug use is addressed at length in the co-factors section, the prevalence of these behaviors among MSM and MSM/F populations is briefly discussed here. In the predominantly White San Francisco sample of the MSM participants in the Vaccine Preparedness Studies (Woody et al., 1996), 89% used alcohol and 62% used illicit drugs in the past 6 months; overall, 9% reported “heavy” current drug use. In the Doll et al. (1991) sample of MSM and MSM/F accessed at a San Francisco STD clinic, 84% used alcohol, 61% used marijuana, 31% used cocaine, and 55% used three or more drugs in the four months prior to study participation. Results from the Fifth Population-Based Survey (Communication Technologies, Inc., 1990) indicate that 21% of San Francisco’s gay and bisexual men are heavy users of drugs such as marijuana, cocaine, speed, or nitrite inhalants.

Proportions of certain MSM and MSM/F populations having sex while high on drugs or alcohol are documented. Of the young MSM and MSM/F in the San Francisco and Berkeley Young Men’s Survey, 39% had unprotected anal intercourse in the six months prior to study participation while intoxicated on alcohol and, in general, they found that the prevalence of unprotected anal intercourse was significantly higher among men who reported using alcohol during sex (Lemp et al., 1994). In the Fairbanks, Bregman, and Maulin, Inc. (1991) study, 13% of American-Indian, 42% of Filipino, and 60% of Latino respondents reported sex while under the influence of alcohol or another drug.

MSM and MSM/F populations who use nitrites (poppers)

Nitrite inhalants, or poppers, are commonly used among MSM and MSM/F populations, and have been found to increase the likelihood of unprotected sex. Ostrow and colleagues (1994) found that men who combined poppers with other drugs were at highest risk both behaviorally and in terms of HIV seroconversion throughout their study. Similarly, Lemp et al. (1994) found that among young MSM and MSM/F in the San Francisco and Berkeley Young Men’s Survey, 60% had unprotected anal intercourse in the six months prior to study participation while high on poppers.

Risk Behavior of MSM and MSM/F Populations in Substance Abuse Treatment

Given the prevalence of substance use among MSM and MSM/F populations, some studies have investigated whether involvement in risk behaviors is proportionately higher among those who seek drug treatment compared to the general MSM and MSM/F populations. Paul and colleagues (1993) compared a cohort of sexually active gay and bisexual men entering

substance abuse treatment recruited at San Francisco's 18th Street Services with findings from the San Francisco Men's Health Study. Overall, they report that the relative risk of engaging in high risk sexual behaviors was consistently greater for the substance abuse treatment sample, with the highest relative risk being for unprotected receptive anal sex. Regarding specific sexual risk behaviors significantly higher rates were found for the treatment program compared to the Men's Health Study sample: 21% v. 17% had unprotected insertive anal sex, 23% v. 15% had unprotected receptive anal sex, and 32% v. 22% had unprotected insertive and/or receptive anal sex. The type of substance which motivated seeking treatment was also reported: 22% reported injection drug use (42% of whom reported sharing needles) in the three months prior to study participation, 63% identified as alcoholic or alcohol abusers, 38% reported amphetamine addiction, 27% marijuana abuse, and 20% cocaine addiction.

Paul et al. (1994) also conducted a survey with a large sample of predominantly White sexually active gay and bisexual men entering substance abuse treatment. Of this sample, 55% engaged in anal intercourse without a condom within the three months prior to the study; of these men, 77% were with a casual partner. Of those who had unprotected anal sex, 30% reported that the insertive partner ejaculated, and 26% reported that the insertive partner withdrew before ejaculation. Overall, 38% had a male primary partner; of those who had unprotected anal sex with their primary partner only, 67% were not in a mutually monogamous relationship. The type of substance which motivated seeking treatment was reported in this study as follows: 56% reported injection drug use in past year, 65% identified as alcoholic or alcohol abusers, 72% identified as "drug abusers or addicts" and 43% identified as both alcoholic and addicts. Exhibit 3.47 itemizes the information listed above.

Exhibit 3.47

Behavioral Studies Males who have Sex with Males (MSM) and Males who have Sex with Males and Females (MSM/F)			
Authors	Study Description	Sexual Behaviors	Drug Use Behaviors
Catania et al. (1991)	Study consisted of a longitudinal cohort and three cross-sectional samples of gay men between to look at changes in condom use among homosexual and bisexual men in San Francisco. Data Collected 1984 to 1987	<ul style="list-style-type: none"> • Condom use increased: 10% always used condoms in 1984 and 40% in 1988 • Percentage reporting no condom use decreased from 76% in 1984 to 34% in 1988 	
Choi et al. (1996)	Evaluation of brief group counseling intervention with 329 self-identified homosexual Asian and Pacific Islander men recruited in San Francisco. Data Collected 1992 - 1994.	<ul style="list-style-type: none"> • Mean number of partners during past three months at baseline was 3.9 • 28% engaged in unprotected anal intercourse • Counseling was associated with a decrease in the number of sex partners by 46% • Chinese and Filipino men reduced unprotected anal sex 	
Communication Technologies, Inc. (1990)	HIV-related knowledge, attitudes, and behaviors among San Francisco's gay and bisexual men: Results from the Fifth Population-Based Survey. Random telephone survey of 401 respondents who tended to be overwhelmingly White, mid-30's, and highly educated. Data Collected 1989	<ul style="list-style-type: none"> • Approximately 30% report engaging in unprotected anal intercourse (UAI), oral-to-anal contact, fisting, or oral sex with semen exchange within the 30 days prior to the interview • Oral sex involving the exchange of semen, and oral-to-anal contact have increased • Over the past year, 18% reported UAI • 16% of respondents can be classified as relapsers, men who made a commitment to never practice unprotected anal sex but did so in the last year 	<ul style="list-style-type: none"> • 7% are frequent and heavy users of alcohol • 21% are heavy users of drugs such as marijuana, cocaine, speed, or nitrite inhalants • 40% have either sought treatment, considered it, or believe they have a substance-use-related problem • 10% have used injection drugs at some point in their lives

Behavioral Studies Males who have Sex with Males (MSM) and Males who have Sex with Males and Females (MSM/F)			
Authors	Study Description	Sexual Behaviors	Drug Use Behaviors
Diaz et al. (1996)	Study of 159 Latino self-identified gay men in Tucson, AZ. Questionnaire in English only, so sample most likely overrepresents highly acculturated men. Data Collected 1992	<ul style="list-style-type: none"> • 22% engaged in unprotected anal intercourse (UAI) with non-monogamous partners during the past 30 days • 51% reported at least one instance of UAI in last year • Of those having any anal sex in last 30 days, 67% had UAI with primary partners and 44% with other partners • Sex while high on drugs/alcohol and sex in public environments were important correlates of HIV risk 	

Behavioral Studies
Males who have Sex with Males (MSM) and
Males who have Sex with Males and Females (MSM/F)

Authors	Study Description	Sexual Behaviors	Drug Use Behaviors
Doll et al. (1991)	<p>198 gay/bi men representing a San Francisco subsample of a multisite study of STD clinic patients. Participants included reported oral and/or anal sex in previous 4 months.</p> <p>Ethnicity: 16% Af-Am 21% Latino 60% White</p> <p>Note: As STD clinic patients, this sample may represent a higher risk population. Data Collected 1988 to 1989</p>	<ul style="list-style-type: none"> • 69% reported unprotected anal intercourse (UAI) in last 4 months; median of 6 episodes • Hispanic bisexuals were more likely to engage in higher levels of UAI • Men with higher frequency of anal intercourse reported lower condom use rates during anal sex episodes. • 35% had UAI 1-2 times; 22% had UAI more than 22 times in past 4 months • 55% reported unprotected oral sex with ejaculation; median of 6 episodes • 18% reported unprotected oral sex without ejaculation • 51% reported having a primary partner, but only 12% had only 1 partner during the previous 4 months • median number of primary partners = 1; median number of other partners = 3; 	<ul style="list-style-type: none"> • 17% reported any IDU during past 4 months • 84% used alcohol • 61% used marijuana • 31% used cocaine • 55% used 3 or more drugs
Doll et al. (1990)	<p>Cohort study of 309 self-identified gay and bisexual men attending an STD clinic in SF. Study compared risk behaviors of men who were aware (n=181) and unaware (n=129) of their HIV status. Predominantly White (93.6%) sample. Baseline data collected 1983-84; follow-up, 1986-87.</p>	<ul style="list-style-type: none"> • Seropositives had higher baseline risk indices than seronegatives, regardless of whether they knew their HIV status (receptive anal intercourse with other partners). • Both groups, regardless of whether they learned their HIV status, demonstrated reductions in high-risk sexual behaviors from 1983-1984 to 1986-1987 	

Behavioral Studies Males who have Sex with Males (MSM) and Males who have Sex with Males and Females (MSM/F)			
Authors	Study Description	Sexual Behaviors	Drug Use Behaviors
Ekstrand et al. (1994)	Analysis of bisexual subsample of the SF Men's Health Study: longitudinal cohort of single men aged 25 - 54 years recruited from the 19 census tracts in San Francisco that had the greatest prevalence of AIDS cases in 1984. Data Collected 1984-1989 (n= 119)	<p>Percent of sample in 1984-85 v. 1988-89 reporting:</p> <ul style="list-style-type: none"> • Sex with men only: (65% v. 70%) • Sex with women only: (6% v. 10%) • Sex with both: (26% v. 7%) • Celibate: (5% v. 13%) <p>Behavior reported during previous 12 months 1984-85 v. 1988-89:</p> <ul style="list-style-type: none"> • Unprotected vaginal sex/multiple female partners (13% v. 3%) • Unprotected anal sex with men/multiple male partners (70% v. 12%) • Unprotected anal sex with women/multiple female partners (4% v. 1%) • Unprotected anal sex with men and unprotected vaginal sex with women (16% v. 2 %) <p>Among HIV-positive men:</p> <ul style="list-style-type: none"> • UAI decreased during 5 year period from 89% to 18% • 7% reported unprotected vaginal sex in 1988-89 <p>Among HIV negative men in 1988-89:</p> <ul style="list-style-type: none"> • 80% reported unprotected vaginal sex and 26% reported UAI with men 	

Behavioral Studies Males who have Sex with Males (MSM) and Males who have Sex with Males and Females (MSM/F)			
Authors	Study Description	Sexual Behaviors	Drug Use Behaviors
Elifson et al. (1993)	53 transgender (MTF) prostitutes were recruited in Atlanta; sample was more than 80% African American. Data Collected 1990 - 1991	With clients: <ul style="list-style-type: none"> • 77% engaged in receptive anal sex; 95% reported sometimes using a condom With primary partner: <ul style="list-style-type: none"> • 47% engaged in receptive anal sex; 76% reported sometimes using a condom 	<ul style="list-style-type: none"> • 66% reported crack use
Fairbank et al. (1991)	Survey of AIDS knowledge, attitudes, and behaviors in San Francisco's American Indian, Filipino, and Latino gay and bisexual male communities. Respondents located at clubs, gay bars, health agencies, etc. <ul style="list-style-type: none"> • 60 Amer. Indians • 106 Filipinos • 100 Latinos Self-identification: <ul style="list-style-type: none"> • Gay: 90% • Bisexual: 2% • Straight: 2% Data Collected 1990	<ul style="list-style-type: none"> • Unprotected anal intercourse with a male partner during previous 12 months. <ul style="list-style-type: none"> Amer. Indian 20% Filipino 34% Latino 47% • 68% of American Indians and Filipinos report having difficulty in talking about condoms with their sexual partners • 46% of Latinos said that condoms are not necessary when they have just one partner 	<ul style="list-style-type: none"> • Percentage reporting sex while under the influence of alcohol or another drug: <ul style="list-style-type: none"> American Indian 13% Filipino 42% Latino 60% • 27% reported marijuana use. • 2% reported injecting cocaine, speed or some other amphetamine.

Behavioral Studies
Males who have Sex with Males (MSM) and
Males who have Sex with Males and Females (MSM/F)

Authors	Study Description	Sexual Behaviors	Drug Use Behaviors
Gage (1995)	Risk behavior survey of young (under 25) African American gay and bisexual men contacted through outreach at SF locations. Data Collected 1992 - 1995.	<ul style="list-style-type: none"> • 69% of those surveyed during 1992-1993 reported any anal intercourse during last 6 months; 29% of those were unprotected • 55% of those surveyed in 1993-1995 reported anal intercourse during last 6 months; 37% of those were unprotected • Of those having anal intercourse during 1993-95, men 19 and younger were more likely to have UAI (30%) than 20-25 year olds (14.4%) • 24% engaged in vaginal intercourse; 21% of these had unprotected vaginal intercourse 	
Kral et al. (in press)	Sexual risk and substance use among 775 runaway and homeless youth recruited in street settings and youth agencies in SF, Denver and New York City. Data Collected 1992-1993.	<p>Relevant MSM and MSM/F findings:</p> <ul style="list-style-type: none"> • 14% of males in San Francisco sample reported ever engaging in receptive anal intercourse; 67% of those did in the past 3 months, and 39% of those reported inconsistent or no condom use • 4% of males surveyed in SF reported unprotected anal intercourse during the past 3 months • 9% of males surveyed in SF reported performing oral sex on a man without a condom • 8% of males surveyed in SF reported trading sex for food/shelter/clothing without using condoms during past 3 months (gender of partner not specified) 	

Behavioral Studies
Males who have Sex with Males (MSM) and
Males who have Sex with Males and Females (MSM/F)

Authors	Study Description	Sexual Behaviors	Drug Use Behaviors
Lemp et al. (1994)	<p>The SF/Berkeley Young Men's Survey of 425 young (17-22-year-old) homosexual and bisexual men sampled from 26 locations. Data Collected 1992 and 1993.</p> <ul style="list-style-type: none"> Ethnicity: <ul style="list-style-type: none"> Afr-Amer 12% A/PI 11% Latino 22% Native-Amer 3% White 49% Other 3% 	<p>Prevalence of unprotected anal intercourse (UAI) in previous six months: 33% of sample</p> <ul style="list-style-type: none"> among those w/steady partners 44% among those w/casual partners 28% among those w/both 28% <ul style="list-style-type: none"> UAI by Ethnicity: <ul style="list-style-type: none"> African American: 39% Asian/PI: 27% Latino: 40% White: 28% Other: 45% Among those with history of forced sex: 41% Among those with no history of forced sex: 27% Among those with positive peer norms re safe sex: 23% Among those with negative peer norms re safe sex: 46% 	<p>Prevalence of unprotected anal intercourse in previous six months:</p> <ul style="list-style-type: none"> While high on poppers: 60% While not high on poppers: 32% While high on alcohol: <ul style="list-style-type: none"> No: 28% Yes: 39% <p>Prevalence of injection drug use:</p> <ul style="list-style-type: none"> Over lifetime: 17% Last 6 mos.: 12% Of these, 14% had shared needles or works that had not been cleaned w/bleach or alcohol in the previous six months IDU by race/ethnicity: <ul style="list-style-type: none"> African American: 10% A/PI: 0% Latinos: 8% Native-American: 25% Whites: 16% Other races: 13%
Mayne et al. (1996)	<p>Observations and survey of sexual risk among men having sex with men in public sex environments (PSE) in San Francisco. Data Collected 1995</p>	<ul style="list-style-type: none"> Unprotected anal intercourse (UAI) is rare in PSE; most UAI happens in private homes between partners/boyfriends 9% of the sample engaged in anal sex at the PSE; 2% had anal sex without a condom Observers reported no condom use in 6% of anal sex acts; condoms were used in 47% of anal sex acts; and in 47% they couldn't tell 	

Behavioral Studies Males who have Sex with Males (MSM) and Males who have Sex with Males and Females (MSM/F)			
Authors	Study Description	Sexual Behaviors	Drug Use Behaviors
McKusick et al. (1990)	<p>Longitudinal predictors of reductions in unprotected anal intercourse among gay men in San Francisco: The AIDS Behavioral Research Project. Subjects recruited initially in 1983 and 1984 at bathhouses and bars and by advertising for individuals who were in committed relationships or who did not use bars or baths.</p> <p>Data reported on 508 men who returned every questionnaire. Predominantly White sample (91%). Data Collected 1984 - 1988</p>	<ul style="list-style-type: none"> • Monogamous men were more likely to practice unprotected anal intercourse (UAI) in 1984 and in 1988 • Reduction in UAI among monogamous men: 71% in 1984 to 27% in 1988 • Reduction in UAI among non-monogamous men: 50% in 1984 to 12% in 1988 • Increase in protected anal intercourse: 15% in 1984 to 24% in 1988 (for non-monogamous) • Monogamous men, compared to non-monogamous men, were more likely to report in 1984 that unprotected anal intercourse was their favorite sexual activity, to be above the median in self-efficacy, and less likely to believe they were exposed to HIV 	
Osmond et al. (1994)	<p>The San Francisco Young Men's Health Study: probability sample of 380 homosexual and bisexual men ages 18-29 interviewed. Data Collected March 1992 - April 1993.</p>	<ul style="list-style-type: none"> • 63% reported at least one receptive anal intercourse (RAI) partner in the past 12 months, 41% of those did not use condoms consistently; • 38% had two or more RAI partners • 59% of those with at least one RAI partner reported using condoms all the time, 21% most of the time, 6% some of the time, 13% none of the time • Partner types reported by sample: Other: 28% Primary: 44% Both: 28% 	<ul style="list-style-type: none"> • 10% reported a history of injection drug use • 61% of those reported having shared injection equipment (41% HIV+). • Subjects reporting IDU did not report more high risk sexual behavior

Behavioral Studies
Males who have Sex with Males (MSM) and
Males who have Sex with Males and Females (MSM/F)

Authors	Study Description	Sexual Behaviors	Drug Use Behaviors
Ostrow et al. (1994)	Cohort study of gay men who participated in the Chicago MACS study recruited from either a community-based STD clinic or the infectious disease program of Northwestern University. Data Collected 1984-1992	See Drug Use	<ul style="list-style-type: none"> • Overall, a pattern of decreasing drug use over 6 years was observed that paralleled a decline in high risk sexual behavior • Alcohol use remained stable and was not associated with sexual behavior change • Men who combined poppers with other drugs were at highest risk both behaviorally and in terms of HIV seroconversion throughout the study
Paul et al. (1993)	314 sexually active gay and bisexual men entering substance abuse treatment. Recruited at 18th Street Services. Results were compared to the San Francisco Men's Health Study. Both samples were predominantly white and well educated. Data Collected May 1988 - Oct 1989.	<ul style="list-style-type: none"> • The relative risk of engaging in high risk sexual behaviors was consistently greater for the substance abuse treatment sample, with the highest relative risk being for unprotected receptive anal sex <p>Sexual behaviors for the treatment program v. SFMHS:</p> <ul style="list-style-type: none"> • Unprotected insertive anal sex (21% v. 17%) • Unprotected receptive anal sex (23% v. 15%) • Unprotected insertive and/or receptive anal sex (32% v. 22%) 	<ul style="list-style-type: none"> • 63% identified as alcoholics or alcohol abusers • 38% amphetamine addiction/abuse • 27% marijuana abuse • 20% cocaine addiction/abuse • 69 of the 314 treatment survey respondents reported IV drug use (primarily speed) in the past 90 days. 29 (42%) reported sharing.

Behavioral Studies

Males who have Sex with Males (MSM) and Males who have Sex with Males and Females (MSM/F)

Authors	Study Description	Sexual Behaviors	Drug Use Behaviors
Paul et al. (1994)	Survey analyzing sexual risk taking of 383 sexually active gay and bisexual men entering substance abuse treatment. Predominantly White sample. Data Collected 1988-1989	<ul style="list-style-type: none"> • 55% of sexually active men engaged in anal intercourse without a condom within past 90 days • 38% had a male primary partner • 30% reported unprotected anal intercourse with ejaculation • 26% reported unprotected anal with withdrawal • Of the 212 who had anal intercourse without a condom, 77% did so with a non-primary partner • Of the 42 men who had unprotected anal sex with a primary partner only, 67% were not in a mutually monogamous relationship 	<ul style="list-style-type: none"> • 56% reported injection drug use in past year • 65% identified as alcoholic • 72% identified as drug abusers or addicts (not alcoholic) • 43% identified as both alcoholic and addict
Peterson et al. (1996)	Evaluation of HIV risk reduction for African American homosexual and bisexual men in San Francisco. Self-reported changes among 318 men receiving single or triple group sessions compared to a control group. Data Collected 1990-1991	<ul style="list-style-type: none"> • Among triple session participants prevalence of UAI decreased from 46% to 20% after 12 months and from 45% to 20% after 18 months • Single session group participants decreased their rates of UAI only slightly 	
Peterson et al. (1992)	African American Men's Health Study. 250 self-identified gay and bisexual men recruited in San Francisco, Berkeley, and Oakland. Data Collected 1989-1990	<p>In past six months:</p> <ul style="list-style-type: none"> • 22% unprotected anal sex with primary partners; 19% with ejaculation • 35% unprotected anal sex with other partners; 30% with ejaculation • 37% engaged in prostitution 	<ul style="list-style-type: none"> • 25% used injection drugs

Behavioral Studies Males who have Sex with Males (MSM) and Males who have Sex with Males and Females (MSM/F)			
Authors	Study Description	Sexual Behaviors	Drug Use Behaviors
SF DPH et al. (1996)	Tri-County Young Men's Survey Data. 750 15-22-year-old gay and bisexual men recruited at multiple sites in SF, Alameda, and Santa Clara Counties. Data Collected 1994-1995.	<p>During previous 6 months:</p> <ul style="list-style-type: none"> • 50% had sex with men and women • 35% had sex with men only • 9% had sex with women only • 7% did not have sex <ul style="list-style-type: none"> • 31% reported unprotected anal intercourse (UAI) during previous 6 months <ul style="list-style-type: none"> • By Ethnicity: <ul style="list-style-type: none"> Afr-Amer: 26% Asian/PI: 23% Latino: 36% White: 32% Other: 39% • Among those having UAI, partners were: <ul style="list-style-type: none"> Primary only: 52% Other only: 24% Both: 19% 	<ul style="list-style-type: none"> • 8% had history of IDU; 5% during past 6 months
Stall et al. (1990)	AIDS Behavioral Research Project: 397 gay and bisexual men in SF who were followed consistently through 8 waves of data collection. Article focuses on relapse from safer sex. Data collected 1984 to 1988	<ul style="list-style-type: none"> • 76% decline in high-risk sexual behavior (UAI) from 1984 to 1988 • 69% of high-risk sex in 1988 wave characterized as relapse • Predominant form of high-risk sex from relapse rather than from consistent high-risk sex 	
Woody et al. (1996)	Substance use and risky behavior were examined among 3,255 gay and bisexual men participants in Vaccine Preparedness Studies in six cities including SF. Sample was 75% White. Data Collected 1995	<ul style="list-style-type: none"> • 61% of "heavy" alcohol users reported high risk sexual behavior (UAI); 49% of "moderate" alcohol users reported UAI • 60% of heavy drug users reported UAI compared to 39% and 31% of non- and "some" drug users, respectively 	<ul style="list-style-type: none"> • 89% used alcohol and 62% used illegal drugs in the past 6 months • 11% consumed alcohol every day or usually > 5 drinks at a time; 42% were moderate alcohol users • 9% reported "heavy" drug use

Behavioral Studies Males who have Sex with Males (MSM) and Males who have Sex with Males and Females (MSM/F)			
Authors	Study Description	Sexual Behaviors	Drug Use Behaviors
Young Men's Survey 2, preliminary analysis. (1996)	YMS 2, San Francisco sample only, ages 17-22 (n=359) sampled with probability proportional to size of venue (venues include bars, dance clubs, and street corners). Data Collected 1994-1995	<ul style="list-style-type: none"> • 33% reported unprotected anal intercourse in last 6 months • 67% reported being high on drugs or alcohol at last sexual encounter • 9% reported having sex with an HIV-positive partner in past 6 months. • 18% reported IDU sex partner 	
Young Men's Survey 3, Preliminary analysis. (1996)	YMS 3, San Francisco sample only age 17-22 (n=247) using randomized site sampling from wide variety of venues including bars, dance clubs, street corners, parks, and bookstores. Data Collected 1994-1995	<ul style="list-style-type: none"> • 36% reported unprotected anal intercourse in last 6 months • 33% reported being high on drugs or alcohol at last sexual encounter • 14% reported sex with an HIV-positive partner in last 6 months • 20% reported IDU sex partner 	

Females who have Sex with Females (FSF) and Females who have Sex with Females and Males (FSF/M)

Because the risk of female-to-female sexual transmission of HIV is thought to be lower than transmission via same gender sex between men or via sex between men and women, females who have sex with females (FSF) have traditionally been thought of as a very low risk group. Similarly, females who have sex with females and males (FSF/M) are often combined with FSF in studies and reports, and are also viewed as being at low risk. Even though female-to-female sexual activity may be a relatively inefficacious means of transmission, FSF and FSF/M are at risk if they engage in unprotected sex with male partners, or if they share injection supplies for IDU.

There have been relatively few studies on behavioral risk of females who have sex with females (FSF) and females who have sex with females and males (FSF/M). The existing studies tend to group females who have had *any* sex with female partners together, thus combining FSF and FSF/M behavioral risk populations. Females who self-identify as lesbian or bisexual (but may not report any sex with females) are also included in these studies. As with most of the behavioral literature, the studies summarized here generally use terms of sexual identity, i.e., “lesbian” and “bisexual,” in reporting research findings. In order to best reflect the study findings, this summary uses the language reported in the research (lesbian and bisexual women), even though this diverges from a focus on the behavioral risk populations.

There are several difficulties in summarizing risk behavior for these populations. For lesbian and bisexual women especially, self-identity may not match sexual behavior. Many women who identify as lesbians also have sex with men. In addition, researchers often do not report separate findings for lesbian and bisexual women or FSF and FSF/M, thus blurring the prevalence of risk behaviors in each of these behavioral risk populations.

Despite the hierarchical, mutually exclusive categories that are used to report risk of infection, a pattern of increased HIV infection risk among lesbian and bisexual women—especially those who inject drugs—is emerging from initial seroprevalence and behavioral research. Such results indicate that high levels of unprotected sex with gay/bisexual men and IDU men, as well as injection drug use, warrant specific interventions targeting this population. The studies also suggest a low perception of HIV risk among females who have sex with females and FSF/M, despite a medium frequency of risk behaviors.

Drug- and Alcohol-Related Risk Behavior of FSF and FSF/M

A primary risk behavior for FSF and FSF/M is injection drug use. Local researchers in the Bay Area Association for Women’s AIDS Research and Education (AWARE) study recruited a sample of women at high risk for HIV. Women who reported a history of sex with high risk male partners, or ten or more partners (male or female) in the past three years were recruited in areas with high rates of poverty, crime, and drug use. While the findings of the study are not representative of the total FSF and FSF/M population, they do point out significant sub-groups who are at very high risk for HIV. The AWARE study found that women who had

had at least one female sexual partner since 1980 were nearly twice as likely to have injected drugs during that period as women who had had no female partners (76% v. 42%) (Young et al., 1993).

Other drug use also presents risk for FSF and FSF/M. A San Francisco study sampled females in public venues identified with the lesbian community, and found the following drug-related co-factors in its sample of FSF and FSF/M: 70% of the women had had sex while high on alcohol or drugs, 3% had exchanged sex for money or drugs, 73% had used at least one illicit drug, and 2% had injected drugs in the past three years (none reported sharing needles) (Mills et al., 1993).

Sexual Risk Behavior of FSF and FSF/M

Multiple and High Risk Partners

All existing studies of FSF and FSF/M that look at both sexual behaviors and sexual orientations have demonstrated that lesbian identity does not necessarily exclude the practice (much less the history) of sex with male partners. In a San Francisco risk behavior study, 73% of lesbian-identified women reported sex only with women, and 25% reported sex with men and women in the past 3 years (Mills et al., 1993). Einhorn and Polgar (1994) found that 53% of self-defined lesbians reported having had sex with at least one man since 1978.

Behavioral studies of FSF and FSF/M generally include sexually active (as well as socially active) samples. In a San Francisco lesbian and bisexual sample, 98% reported sex with men, women, or both in the past three years. This sample also had high rates of multiple partners; in the past three years, 75% had had sex with more than one partner. Among those with multiple partners, 37% described them all as primary. This point is significant because unprotected sexual behaviors tended to be far more common with primary than with other partners (Mills et al., 1993). Among crack-using and/or injection drug-using FSF and FSF/M, 21% reported multiple female sex partners for the previous 30 days alone, and 62% had a history of sex work. Crack users, who were more likely to be African American (76%), were also more likely to have had multiple female partners and to have traded sex for drugs (Kral et al., 1996).

Behavioral studies provide evidence of potentially risky sexual partners for women in this population. Among lesbian and bisexual women sampled in 1993 in San Francisco and Berkeley, 81% reported having sex with men (possibly in addition to female partners) during the past three years. Of those, 10% reported sex with gay or bisexual men, and 6% with male IDU (Lemp et al., 1995). In a different San Francisco-based study, 12% of the sample reported sex with a (known or presumed) injection drug-using woman, 5% reported sex with a (known or presumed) male IDU, and 11% reported sex with a gay/bisexual man in the past three years (Mills et al., 1993). These findings were similar to those of an East Coast study, in which more than half of the sample (58%) had had sex with at least one partner with an unknown sexual or drug history, and one-quarter (25%) reported at least one partner who had had sex with an IDU or a man known or presumed to be gay/bisexual. This study found that a greater percentage of bisexual respondents than lesbian respondents reported risky partners. In addition, the African-

American respondents were more likely than the Latina or White respondents to have had one or more of the following three potential risks: injection drug use since 1978, IDU partner, and/or gay or bisexual male partner (Einhorn and Polgar, 1994).

Higher risk sexual practices with male partners may be more common among women who have also had female sexual partners, as suggested by Young et al. (1993). In this San Francisco sample, women who had had at least one female sexual partner in the previous three years were more likely than women without female partners to report having engaged in anal intercourse with a male partner (33% v. 19%). This study, however, didn't specify whether this was protected or unprotected intercourse.

Unprotected Sex

All of the existing studies suggest that the population of FSF and FSF/M has been slow to adopt measures for preventing HIV transmission. The eastern U.S. study of FSF and FSF/M found that: 1) of those women who had had sex with at least one IDU partner, only 4% reported a consistent practice of "safer sex"¹ with those partners; 2) of those who reported previously having unprotected sex with high-risk partners (defined in the study as gay or bisexual men or IDUs), only 9% were currently practicing consistent safer sex; and 3) of those with a history of injection drug use, only 18% were currently practicing consistent safer sex. Finally, of those who claimed that they always practiced safer sex, only 35% reported using barriers throughout the menstrual cycle, and an additional 19% used barriers *only* during menstruation.

Local studies of women who have sex with women found rates of unprotected oral sex with women ranging from 92% overall (Lemp et al., 1995), to 96% of those with primary female partners and 81% of those with non-primary female partners (Mills et al., 1993). These findings were consistent with other national samples of FSF and FSF/M, where unprotected sex with female partners was reported by 93% to 94% of women (Kral et al., 1996; Einhorn and Polgar, 1994).

The rates of unprotected vaginal sex with men among women in local studies of FSF and FSF/M ranged from 40% (Lemp et al, 1995) to 53% (Mills et al, 1993) of those who reported having male partners. Lemp et al. (1995) also found that 10% of those with male sexual partners reported unprotected vaginal or anal sex with gay/bisexual men and/or male IDUs. Only 10% of those reporting sex with gay/bisexual male partners in a national sample reported consistent condom use with gay/bisexual partners (Einhorn and Polgar, 1994). Among the 110 crack-using and/or IDU women who had recently had sex with men (as well as women) in the 30 days prior to the Urban Health Study interview, 70% reported sometimes or never using condoms for vaginal sex with male partners, and 74% of those engaging in anal sex reported only sometimes or never using condoms (Kral et al., 1996).

¹ Safer sex was defined variously by the respondents in this study. It seems that less than half of the sample felt that safer sex requires the use of latex (or other) barriers for manual (internal), oral, anal, and vaginal sex.

Younger FSF and FSF/M

In general, analysis of young FSF and FSF/M suggests that these women face a higher risk for infection than their older counterparts. A San Francisco behavior study found that younger lesbians (18-24) were more likely than older lesbians to have had sex with men (59% v. 18%), and more likely to have had sex with gay or bisexual men (19% v. 3%), in the past three years. Younger women in the study were also more likely to have had sex with male IDUs in the past three years (11%). Moreover, younger women were more likely than older women to identify as bisexual (34% v. 15%), and bisexually-identified women were more likely than lesbian-identified women to have sex with IDU men (14% v. 2%), as well as with gay or bisexual men (34% v. 5%) (Mills et al., 1993). This study also found that younger women were more likely than older women to report unprotected sex with men (67% v. 46%) (Mills et al., 1993). Lemp et al. (1995) discovered a higher prevalence of unprotected receptive vaginal or anal sex among younger than among older women. A summary of the information previously listed is displayed in Exhibit 3.48

Exhibit 3.48

Summary of Behavioral Studies Females who have Sex with Females (FSF) and Females who have Sex with Females And Males (FSF/M)			
Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Einhorn et al. (1994)	Anonymous survey of 1,086 lesbian and bisexual women recruited at a women's festival, bars, organizations, and personal contacts primarily in the Eastern U.S. Data Collected 1989-1991	<ul style="list-style-type: none"> • 53% of self-defined lesbians reported sex with a man since 1978; 13% with a known gay/bisexual man • 90% of self-defined bisexuals reported sex with a man since 1978; 42% with gay/bi men • 9% of lesbians reported sex with IDU partner since 1978. • 15% of bisexuals reported sex with IDU partner since 1978. • Of women who had sexual contact with MSM or MSM/F, 96% did not always practice "safer sex"; 75% had unprotected vaginal intercourse; 15% had unprotected anal sex. • 6% of women reported practicing "safer sex" with female partners, although definitions varied. 	<ul style="list-style-type: none"> • 2.5% reported injection drug use with needle sharing since 1978; 8% of African Americans reported sharing needles v. 2% Whites.
Kral et al. (1996)	HIV-related risks of 231 drug using women (119 IDU) who have sex with women in 19 cities. 57% African American. Data Collected 1992-1994	<ul style="list-style-type: none"> • 62% had a history of sex work • 50% also had sex with men in past 30 days • 30% always used condoms during vaginal sex with men • 26% of those engaging in anal sex always used condoms • 21% had multiple female partners in past 30 days • 7% used barrier protection during oral sex with women • Crack users were more likely than IDUs to have had multiple female sex partners (27% v. 16%) and to have traded sex for drugs (58% v. 38%) 	<ul style="list-style-type: none"> • Crack cocaine users were more likely to have drunk alcohol in past 48 hours than IDUs (72% v. 46%)

Summary of Behavioral Studies
Females who have Sex with Females (FSF) and
Females who have Sex with Females And Males (FSF/M)

Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Lemp et al. (1995)	498 lesbian and bisexual women sampled in public venues in SF and Berkeley - HIV seroprevalence and risk behaviors. 68% self identified as lesbian, 22% as bisexual, 4% as heterosexual, and 7% undecided. Data collected 1993	<ul style="list-style-type: none"> • 92% report unprotected oral sex with women; 25% vaginal fisting; 29% sharing sex toys • 81% report sex with a man in past three years; of those, 40% had unprotected vaginal intercourse; 11% had unprotected anal intercourse, 10% with gay/bi men and 6% with male IDU • Younger women and self-identified bisexuals were more likely to have unprotected sex with men • Among the 468 who had sex with women, 11% had sex with sex workers, 9% with IDUs and 8% with both IDUs and sex workers 	<ul style="list-style-type: none"> • 3% of self-defined lesbians reported IDU; 6% of bisexuals reported IDU • Among women w/history of IDU (10%), 71% report sharing needles.

Summary of Behavioral Studies
Females who have Sex with Females (FSF) and
Females who have Sex with Females And Males (FSF/M)

Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Mills. (1993)	<p>Cross sectional survey of 483 women in street and community locations in SF (sample is of socially active lesbian and bisexual women). Data Collected 1992</p> <p>Ethnicity: 11% Afr-Amer 9% Asian/PI 11% Latina 64% White</p>	<p><u>In the previous three years...</u></p> <p>Among women with male primary partners (7%):</p> <ul style="list-style-type: none"> • 70% engaged in unprotected vaginal intercourse. • 85% received cunnilingus w/o a barrier. • 53% engaged in unprotected fellatio with, and 73% w/o, swallowing of semen. • 21% engaged in unprotected anal sex. <p>Among women with non-primary male partners (19%):</p> <ul style="list-style-type: none"> • 43% engaged in unprotected vaginal intercourse. • 72% received cunnilingus w/o a barrier. • 26% engaged in unprotected fellatio with, and 49% w/o, swallowing of semen. • 10% engaged in unprotected anal sex. <p>Among women with female primary partners (72%):</p> <ul style="list-style-type: none"> • 96% engaged in cunnilingus (w/o), and 24% with, a barrier. • 96% put fingers in the vagina w/o gloves. • 49% put fingers in the anus w/o gloves. • 27% engaged in vaginal fisting w/o gloves. <p>Among women with non-primary female partners (67%):</p> <ul style="list-style-type: none"> • 81% engaged in unprotected cunnilingus. • 83% put fingers in the vagina w/o gloves. • 29% put fingers in the anus w/o gloves. • 19% engaged in vaginal fisting w/o gloves. 	<ul style="list-style-type: none"> • 2.3% reported injection drug use in the past 3 years • 73% used at least one illicit substance in the past 3 years (67% marijuana, 23% ecstasy/MDA, 22% LSD/psychedelics, 21% non-crack cocaine, 14% "downers," and 14% "uppers") • 82% drink alcohol at least a few times a year (53% have 2 or 3 drinks at one time and 10% have four or more drinks) • 70% said they have been high on alcohol or other drugs during sex in the past 3 years

Summary of Behavioral Studies
Females who have Sex with Females (FSF) and
Females who have Sex with Females And Males (FSF/M)

Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Young et al. (1992)	<p>711 women who have participated in the AWARE project since 1988 in San Francisco.</p> <p>76% identified as heterosexual, 3% as exclusively lesbian and 21% as bisexual</p> <p>Ethnicity: 69%: Afr-Amer 6%: Latina 21%: White 4%: other</p>	<ul style="list-style-type: none"> Twice as many women who identified either as exclusively homosexual or as bisexual had engaged in anal intercourse with a male partner during the last 3 years (32% v. 16%) 	<ul style="list-style-type: none"> 99.7% of women used drugs in the past 3 years 41% injected drugs Women who had had one or more female sex partners since 1980 (329) were nearly twice as likely to inject drugs during the same time period as women who had no female partners (72% v. 42%) 32% used crack cocaine

Males Who Have Sex With Females (MSF) And Females Who Have Sex With Males (FSM)

While the prevalence of HIV infection among non-injection drug using males who have sex with females (MSF) and females who have sex with males (FSM) is relatively low, the risk behaviors of this population suggest increasing potential for further spread of HIV. According to a population-based study in multi-ethnic neighborhoods in San Francisco, the overall prevalence of risk behaviors among non-homosexually active men and women is 12% (Fullilove et al., 1992).

Engaging in unprotected sex with multiple partners, high-risk partners, and/or sex outside of primary relationships are the major risk behaviors for HIV infection among MSF and FSM populations. Among HIV-discordant heterosexual couples, a large study examined safe sex behavior with primary and non-primary partners. Researchers found that among 48 couples, there were 115 other partnerships outside the primary relationship. Of these other partnerships, 38% involved unprotected sex with another partner, and 27% involved concurrent unprotected sex with the primary partner (van der Straten et al., 1996). Given the high level of unprotected sex among heterosexuals with definitively known risk for HIV, an HIV-infected partner, the prevalence of high risk behavior in the broader heterosexual population is probably much greater

Fortunately, evaluation research has demonstrated the effectiveness of prevention education interventions in reducing the behaviors that put populations at risk. Kamb and colleagues (1996) tracked the behaviors of patients in sexually transmitted disease (STD) clinics—a group likely to be at higher risk than the general population. Preliminary findings indicate that the percent reporting inconsistent condom use with a main partner at baseline (86%) decreased at the three month follow-up to 66%. Those reporting inconsistent or no condom use with other partners also decreased from 72% to 43% three months after one-on-one risk reduction counseling at the clinic. Consistent across all behavioral research findings is the tendency for sexual partners in primary, and especially assumed monogamous, relationships to have higher rates of unprotected sex than individuals having sex with partners outside a primary relationship or with multiple partners.

The literature on behavior among adult MSF and FSM generally presents information separately for males and females and often delineates ethnic differences when available. This summary first describes the behaviors of males and then presents information for females. Information on ethnic differences and other specific target populations are integrated throughout, when available.

Males who have Sex with Females (MSF)

The San Francisco population-based AIDS in Multi-ethnic Neighborhoods (AMEN) study found that just over 11% of men sampled reported one or more risk behaviors in the past year. These behaviors included sex with a high risk partner (HIV-infected person, homosexually active man or IDU), unprotected sex with more than four partners, or having a sexually transmitted disease. This percentage varied slightly by ethnicity, with White men (14%) more

likely to report risk behaviors than Hispanics (9%) or African Americans (11%) (Fullilove et al., 1992).

Local studies of males who have sex with females reveal higher rates of contact with multiple sexual partners compared to national samples. Less than one-fifth (18%) of men in the National AIDS Behavioral Studies sample of high-risk cities reported multiple partners during the previous twelve months (Dolcini et al., 1993). The proportion reporting multiple partners in the National Alcohol Survey was somewhat higher, especially among Hispanic (29%) and African American (47%) men, compared to White men (18%) (Caetano & Hines, 1995). In contrast, the AMEN study in San Francisco found that 64% of African American men and 56% of White men reported two or more sexual partners in the last year. Furthermore, 40% of African American and 43% of White men said they had five or more sexual partners (Peterson et al., 1992).

The prevalence of unprotected sex among males who have sex with females presents a significant risk for HIV in this population. The many studies show that almost none use condoms on a regular basis. Catania and colleagues' (1992) analysis of the AMEN study data found that 91% of the men reported only sometimes or never using condoms. This percentage did not differ among various ethnic groups. This 91% includes both monogamous and non-monogamous partnerships, and thus may overstate the degree of risk. However, even accounting for only non-monogamous and other risky partnerships, significant risk is still present. For example, Peterson and colleagues' 1992 analysis of the same data found that among men reporting sexual risk factors, approximately 60% never used condoms.

National studies have also found high rates of unprotected sex among men. Among men with multiple partners in a national sample of adults in cities considered to be high risk, 82% reported inconsistent condom use with their primary partners, and 72% never or sometimes used condoms with their other partners (Dolcini et al., 1993).

Generally across the country, longitudinal research has suggested that high risk sexual behavior may be decreasing among men and women who have sex with the opposite gender. This trend appears to hold among men in San Francisco as well. Samuel et al. (1991) found, in analyzing a heterosexual subsample of the San Francisco Men's Health Study, that the percentage of men reporting any condom use increased from 48% in 1984 to 61% in 1989. The men in this sample also reported a decrease in the number of sexual contacts. Over half (53%) reported two or more sexual partners in 1984, and 41% reported multiple partners in 1989.

Females who have Sex with Males (FSM)

Risk for HIV among non-injection drug-using women was documented in Fullilove and colleagues' (1992) analysis of the San Francisco AMEN Study data, which found 13% reporting at least one risk behavior for HIV. Risk behaviors were defined in this study as having one or more of the following during the past year: an HIV-infected sex partner, a homosexually active male sex partner, an injection drug-using sex partner, a sexually transmitted disease, and/or unprotected sex with more than four partners. White women were the most likely group to

report a risk behavior; more than one-fifth (21%) of White women, 10% of African-American and 5% of Hispanic women had engaged in one or more risk behaviors in the past year. The high rate for White women was due to a high prevalence of having an IDU sexual partner (9%), having a recent STD (9%), or having a homosexually active male partner (5%) (Fullilove et al., 1992).

Among women at risk, however, African American women were more likely to engage in unprotected sex than White women, although rates of unprotected sex for all women were still quite high. Peterson et al. (1992) found in their analysis of sexually active African American and White heterosexuals in the AMEN sample that condom use among women reporting sexual risk factors (defined as having a risky sex partner or more than two sex partners in the past year) was very infrequent. Of those reporting sexual risk, the majority of both African American women (90%) and White women (86%) reported having unprotected sex (sometimes or never using condoms) during the past year. African American women at sexual risk, however, were more likely to report *never* using condoms (75%), compared to 53% of White women at sexual risk.

In general, prevalence of multiple sexual partners is also high among women who have sex with men. Among sexually active heterosexual women in the AMEN study, one-third (33%) of African American women and 45% of White women reported two or more sexual partners in the past year, and 24% of African American and 34% of White women said they had five or more partners (Peterson et al., 1992). These rates were similar to findings in two San Francisco knowledge and behavioral surveys among high-risk women which also revealed high rates of multiple sexual partners. The percentage reporting two or more partners in the past six months ranged from 43% to 49% (PHREDA Project, 1993; PHREDA Project, 1993-94). Consistent with other studies (van der Straten et al., 1996; Weinstock et al., 1993), women were less likely to have unprotected sex with other partners (46%) than with their primary partners (81%) (PHREDA Project, 1993-94). A national survey of heterosexuals in high risk cities (including San Francisco) also found that among women with multiple partners (8% of sample) unprotected sex with a primary partner was more prevalent (78%) than with other partners (68%). This study also discovered higher rates of unprotected sex among women reporting three or more partners compared to women reporting two partners in the past year (Dolcini et al., 1993).

Sex with high-risk partners is another important risk factor for HIV transmission among females who have sex with males. Seventeen percent (17%) of White women and 5% of African American women in the AMEN sample of sexually active heterosexuals in San Francisco reported sex with an IDU during the past year (sample included IDUs) (Peterson et al., 1992). Among non-injection drug-using women in the AMEN sample, 9% of White women, 4% of African American women, and 3% of Latina women reported sex with an IDU in the past year (Fullilove et al., 1992). In a national sample of women in high risk cities (including San Francisco), 9% reported sex with a risky partner during the past year. Of these women with risky partners, the partners were classified as high-risk because of multiple partners (72%), injection drug use (17%), or other risk factors (11%) (Grinstead et al., 1993). A KABB study of non-injection drug-using female sex partners of male IDUs in Long Beach, CA, found very high rates of unprotected sex in this sample. Nearly all (95%) reported engaging in unprotected

vaginal sex during the past six months (a shorter time period than many studies), and 7% reported unprotected anal sex in the past six months (Corby et al., 1991).

Studies focusing on young women specifically have also found significant risk for HIV transmission through heterosexual risk behaviors. Initial results from a sample of young (18-29 year old) women (including 11 IDUs) in San Francisco, found that two-thirds (66%) did not use a condom during their last sexual contact with a primary partner and nearly one-third (31%) reported unprotected sex during their last contact with other partners. Thirty percent reported a history of sex with an IDU, 15% had had sex with a gay or bisexual man, and 21% had traded sex for drugs or money (McFarland, 1996).

Similar prevalence of unprotected sex was found in a sample of 267 young women attending family planning clinics in San Francisco and Oakland. The vast majority (88%) reported sometimes or never using condoms with a primary partner. More than one-third (37%) had sex with a partner outside of a primary relationship in the past year, and of these, 65% reported sometimes or never using condoms with that other partner. Other risk factors reported were history of STD infection (53% overall, 71% of African Americans), belief that primary partner had other partners (19% overall, 34% of African Americans), and having an injection drug-using partner (12%) (Eversley et al., 1993).

Populations in Drug Treatment (MSF and FSM)

Research conducted among populations in drug and alcohol treatment programs suggests that elevated risk for HIV infection exists in this population. Two studies of populations in treatment programs (one with gay/bisexual men [Paul et al., 1994] and one with heterosexual men and women [Avins et al., 1994]) found higher rates of HIV infection and high risk sexual behavior than in comparable population-based studies.

Avins and colleagues' (1994) survey of 888 heterosexual clients of alcohol treatment programs (76% male) found that the rates of high risk sexual behavior in this clinic-based study were several times higher than those among comparable populations in the AMEN study. Only 3% reported consistent condom use. Unprotected sex was more common with primary partners; 71% reported they did not use condoms when having sex with their primary partners, and 43% of those with other partners never used condoms. Nearly half of the sample (45%) reported three or more partners during the previous year. In addition, 26% of those with no history of injection drug use reported having sex with an IDU.

The association between alcohol and drug use during sex and engaging in high sexual risk behavior was indicated in Woods and colleagues' (in press) study of adults in alcohol treatment. Nearly one-fourth (24%) of the sample of alcohol treatment clients used alcohol before each sexual contact with their primary partner; 56% drank prior to sex with other partners (Avins et al., 1994).

MSF and FSM who Use Crack

Several studies have shown that populations that use crack may be at increased risk for HIV infection. The associations between crack use and HIV are discussed further in the co-factor section of this chapter. Crack users have been found to engage in higher risk sexual behaviors such as commercial sex and having multiple partners (Edlin et al., 1992). One study found that crack users were more likely than injection drug users to report multiple partners. More than half (52%) of the female crack smokers reported multiple partners, and women averaged more sexual partners than men (Booth et al., 1993). Edlin and colleagues (1996) also found that 20% of crack smokers reported sex with an injection drug-using partner.

Smoking crack before engaging in sexual activity presents increased likelihood of unprotected, high risk behavior. More than three-fourths (78%) of a sample of crack-addicted men and women entering treatment reported having sex after smoking crack, with inconsistent condom use. Women in the sample reported this behavior much more often than men (1-2 times per week compared to 2-3 times per month). Booth and colleagues (1993) also found that crack smokers used condoms inconsistently: 56%-67% of crack smokers reported unprotected sex compared to 44% of non-crack users (Booth et al., 1993). High rates of trading sex for drugs were evident in the Schumacker (1996) sample (70%), and women engaged in commercial sex with greater frequency than men.

Incarcerated MSF and FSM

Although there are no published behavioral studies documenting risk among incarcerated adults in San Francisco, a recent cross-sectional behavioral survey was conducted in Contra Costa County's jail. This study sampled newly-arrested inmates who had been held in custody for three days or longer. Most of this sample self-identified as heterosexual, and 73% were in a primary relationship. Over half (57%) of the sample had two or more partners in the past year. Those in primary relationships were less likely to use condoms (66% never use condoms) than those with no primary partner (46% never use condoms). Alcohol and drug use was high in this sample, with 22% drinking alcohol daily, 53% using marijuana, 30% using crack or cocaine, 31% using crack, and 11% using heroin in the past year (Temple, 1993).

FSM in the Sex Industry

Increased risk for HIV among female commercial sex workers is documented in several HIV prevalence and behavioral studies. Behavioral risk includes high rates of drug use (particularly injection drugs and crack cocaine) and unprotected sex with multiple, risky partners. A thorough discussion of commercial sex as a co-factor occurs later in this chapter, but some specific risk behaviors are summarized here.

In a 1990 street recruited cohort of female sex workers (the sample was predominantly African American), 8% were infected with HIV and 17% were infected with syphilis. Drug use was common in this cohort, with over two-thirds having smoked crack and over one-third having injected drugs. Almost all (94%) of this cohort always or sometimes used condoms with clients,

but only 25% did so with their primary partner (this pattern held for HIV- and syphilis-infected women). Most women felt that changing behavior with personal partners is more difficult than changing behavior with commercial partners. The women in this cohort also displayed the intention to reduce AIDS risk most often with clients rather than steady partners (Dorfman et al., 1992).

In addition to those who consider sex work their primary source of income, there are other populations who trade sex for drugs or money on occasion. Several studies have shown that populations who smoke crack cocaine often engage in trading sex for money or drugs. For example, 56% of female crack smokers in a San Francisco sample reported exchanging sex for money or drugs and 29% of those did not use a condom (Edlin et al., 1996). Behavioral studies of males who have sex with males and females who have sex with females is detailed in Exhibit 3.49. Information about behavioral studies on populations who use crack or are sex workers are listed in Exhibits 3.50 and 3.51.

Exhibit 3.49

Summary of Behavioral Studies Males who have Sex with Females and Females who have Sex with Males			
Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Avins et al. (1994)	HIV Infection and Risk Behaviors Among Heterosexuals in Alcohol Treatment Programs: Cross-sectional interview survey and seroprevalence screening of 888 heterosexual clients (76% male) from alcohol treatment programs. Data Collected Oct. 1990-Dec. 1991	<ul style="list-style-type: none"> • 71% did not use condoms when having sex with primary partners • 43% of those with an other partner never used condoms • Only 3% reported consistent condom use • 24% used alcohol before each sexual contact with primary partner; 56% with an other partner • 45% reported 3 or more partners during previous year • The rates of high-risk sexual behavior are several times higher than those among comparable subjects in the AMEN study 	<ul style="list-style-type: none"> • 41% had a history of injection drug use and 80% reported sharing their injection equipment at some point • 88% of those who had ever injected reported injection drug use in past year • 26% of those reporting a history of injection drug use reported having sex in past year with someone they believed had never injected drugs • 26% of those with no history of injection drug use reported having sex w/ IDU

Summary of Behavioral Studies			
Males who have Sex with Females and Females who have Sex with Males			
Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Caetano et al. (1995)	<p>Analysis of alcohol use, high-risk sex, and ethnicity data used as follow-up to 1984 National Alcohol Survey.</p> <p>Sample included:</p> <p>957 Whites 923 African Americans 929 Latinos/as.</p> <p>Less than 2% of the sample reported sex with partners of the same gender. Data Collected 1991-92</p>	<ul style="list-style-type: none"> African American and Latino men reported more frequent sex and greater number of sexual partners. Males with multiple partners in past year: <ul style="list-style-type: none"> 47% of African Amer. 29% of Latino 18% of White Females with multiple partners in past year: <ul style="list-style-type: none"> 14% of African Amer. 3% of Latino 12% of White African American men were most likely to engage in high risk sexual behavior (inconsistent condom use, non-monogamous), especially those who were heavy drinkers (78%), compared to 53% of Latino male heavy drinkers and 41% of White male heavy drinkers Percentage of females reporting high risk sexual behavior: <p>Non-drinker/Drinker</p> <p>28% / 43%: African-Amer. 21% / 33%: Latino 12% / 29%: White</p>	<ul style="list-style-type: none"> Percentage of women reporting drinking 5 or more drinks on any occasion: <ul style="list-style-type: none"> 21% of African Amer. 27% of Latina 25% of White % of men reporting drinking 5 or more drinks monthly: <ul style="list-style-type: none"> 14% of African Amer. 22% of Latino 15% of White

Summary of Behavioral Studies
Males who have Sex with Females and Females who have Sex with Males

Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Catania et al. (1992)	AMEN (AIDS in Multi-Ethnic Neighborhoods) Study. Household probability sample of 1229 unmarried men and women 20-44 years in 16 census tracts characterized by high rates of STDs and admission to drug programs; similar proportions of Afr-Am., White, and Hispanic residents; and proximity to areas of high HIV seroprevalence. Data Collected 1988-1989	<ul style="list-style-type: none"> • % of heterosexuals reporting only sometimes or never used condoms: Men: 91% overall 88% African American 89% Latino 91% White Women: 91% overall 88% White 93% African American 94% Latina • Those w/multiple sexual partners were least likely to use condoms 	
Diaz et al. (1994)	Risk behaviors of 497 persons with heterosexually-acquired HIV infection in the United States: Results of a multi-state surveillance project. Data Collected 1991-1992	<ul style="list-style-type: none"> • 49% of men reported contact with sex worker, 86% of those multiple times • 75% of women never used a condom (18% sometimes), in the 5 years prior to knowing HIV status • 68% of men never used a condom (26% sometimes) in the 5 years prior to knowing HIV status • % with multiple sexual partners in past 5 years: (2-5 partners / >5 partners) Women: 37% / 23% Men: 22% / 61% 	<ul style="list-style-type: none"> • Drug use in past five years: • IDU: Women: 39% Men: 39% • Crack: Women: 16% Men: 16% • Heavy alcohol use: Women: 12% Men: 29%

Summary of Behavioral Studies			
Males who have Sex with Females and Females who have Sex with Males			
Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Dolcini et al. (1993)	<p>National AIDS Behavioral Surveys: Interviews w/ 10,630 people age 18-75. Analysis of the demographic characteristics of heterosexuals in high risk cities with multiple partners. Data Collected June 1990 - February 1991.</p> <p>Ethnicity: 23% Af-Am 14% Latino/a 59% White 5% Other</p>	<ul style="list-style-type: none"> • Almost half of men and women with multiple partners never use condoms • % of sample in high-risk cities reporting multiple partners in previous 12 months: Men: 18% Women: 8% • Among those reporting multiple partners, % reporting only sometimes or never using condoms: with primary partner: Men 82% Women 78% with other partners: Men 72% Women 68% • Inconsistent condom use among women reporting 3, 4, or more sexual partners is more prevalent than among women reporting 2 partners in the previous year (85% and 79% v. 58%) 	

Summary of Behavioral Studies
Males who have Sex with Females and Females who have Sex with Males

Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Dorfman et al. (1992)	<p>Women in the Sex Industry: Interviews with 182 women who were sex workers. Over-representation of African American women reflects outreach and recruitment efforts aimed at African-American neighborhoods known for high use of crack and other drugs and prostitution. Data Collected 1989-90.</p> <p>Ethnicity: 74% Afr-Amer 6% Latina 4% Native Amer 17% White</p>	<ul style="list-style-type: none"> • 94% always or sometimes used condoms w/ clients but only 25% did so with their personal partners (this pattern remained for HIV- and syphilis-infected women) • 72% said they feel they are at risk for getting AIDS • Most women felt that changing behavior with personal partners is more difficult than changing behavior w/commercial partners • Women displayed the intention to reduce AIDS risk most often with clients rather than steady partners 	<ul style="list-style-type: none"> • 66% used crack • Syphilis was most prevalent among women who used crack exclusively (23% infected) • 39% of cohort had injected drugs • 11 of the 14 women who were HIV-positive had injected drugs

Summary of Behavioral Studies			
Males who have Sex with Females and Females who have Sex with Males			
Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Eversley et al. (1993)	<p>267 young adult female family planning clients attending Planned Parenthood clinics in SF and Oakland were surveyed to assess sexual risk and perception of risk for HIV. Data Collected June 1989 - October 1990</p> <p>Ethnicity: 37% Afr-Amer 10% Asian 11% Latina 40% White</p>	<ul style="list-style-type: none"> • 81% reported at least one risk behavior for being sexually exposed to HIV • 45% reported 2 or more risk behaviors (no significant ethnic differences) • 53% had a history of STD infection; African-Americans (71%) were more likely than Whites (42%) • 88% report inconsistent or no condom use with primary partner • 19% believe that primary partner may have other partners; African-Am. (34%) were more likely than Whites (7%) and other ethnicities (17%) • 37% had sex with partner outside of primary relationship in past year; of these, 65% report inconsistent or no condom use with outside partner • 12% had IDU partner 	
Fullilove et al. (1992)	<p>AMEN Study: Analysis of various risk behaviors among heterosexual men and women. Data Collected 1988-1989</p>	<ul style="list-style-type: none"> • % reporting one or more risk behaviors in the past year: Women: Hispanic 5% African-Amer. 10% White 21% Men: Hispanic 9% African Amer. 11% White 14% 	

Summary of Behavioral Studies
Males who have Sex with Females and Females who have Sex with Males

Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Grinstead et al. (1993)	<p>Data from 3,482 women in 23 urban areas who completed the National AIDS Behavioral Surveys.</p> <p>Data used in this analysis come from the highest-risk cities.</p> <p>89% had sex with males only in past five years; 8% were celibate. Data Collected 1990-1991</p> <p>Ethnicity: African-Amer: 25% Hispanic: 15% White: 56% Other: 5%</p>	<ul style="list-style-type: none"> • 15% of women reported having had multiple partners, a risky primary partner (IDU, etc.), or both • Younger women (18-29) were more likely to have multiple partners • % of women with multiple partners engaging in unprotected sex during past 6 months: With primary partner: 84%; 48% reported <u>no</u> condom use • With an other partner: 74%; 59% reported <u>no</u> condom use • Bisexuals reported higher risk behaviors (33% reported multiple partners in past year, 8% reported a risky male partner and 12% reported both) 	
Kamb, et al. (1996)	<p>Preliminary results from evaluation of counseling program to reduce HIV/STD risk among STD clinic patients in 5 cities including San Francisco. Data Collected 1993-1995</p>	<ul style="list-style-type: none"> • % reporting no condom use with primary partner at baseline (52%) decreased at 3 month follow-up (32%). No condom use with other partners also decreased from 33% to 16% • % reporting always using a condom with primary partner increased from baseline of 14% to 34%; with other partners from 28% to 57% 	

Summary of Behavioral Studies			
Males who have Sex with Females and Females who have Sex with Males			
Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
McFarland. (1996)	Preliminary results of the Young Women's Survey in San Francisco; data for 100 women ages 18-29. No Date Given	<ul style="list-style-type: none"> • 98% had ever had vaginal, anal, or oral sex; 32% had ever had anal sex • 66% did not use a condom during last sexual contact with primary partner • 31% did not use a condom during last sexual contact with another partner • 15% had ever had sex with a gay/bisexual male • 30% had ever had sex with an IDU • 21% had ever traded sex for money or drugs 	<ul style="list-style-type: none"> • 11% injected drugs in last 6 months

Summary of Behavioral Studies
Males who have Sex with Females and Females who have Sex with Males

Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Peterson et al. (1992)	Data from the AIDS in Multiethnic Neighborhoods (AMEN Study): random sampling of 16 San Francisco census tracts in the Mission, Western Addition and Bayview-Hunter's Point. Analysis of 848 unmarried, sexually active African American and White heterosexual males and females. Data Collected 1988-1989	<ul style="list-style-type: none"> • % of women with IDU partner in last year: African American: 5% White: 17% • % with 2 or more partners in last year/no condom used: Men: African Amer: 64% / 12% White: 56% / 13% Women: African Amer: 33% / 4% White: 45% / 6% • % with 5 or more partners in past year: Men: African Amer: 40% White: 43% Women: African Amer: 24% White: 34% • % of those with sexual risk factor who never use condoms: Men: African Amer: 62% White: 60% Women: African Amer: 75% White: 53% 	<ul style="list-style-type: none"> • IDU use: Ever/in last year Men: Afr Amer: 12% / 4% White: 17% / 6% Women: Afr Amer: 5% / 2% White: 15% / 6%
PHREDA Project. (1993)	KABB surveys conducted in four public housing projects with 591 women enrolled in PHREDA project. Data Collected 1993	<ul style="list-style-type: none"> • 43% had two or more partners in the past 6 months • 28% had 3 or more partners • 16% reported trading sex for money, drugs, food, or shelter 	<ul style="list-style-type: none"> • The response rate for drug use was low; however, of those who reported use: 43% reported crack 7% reported cocaine .3% reported heroin

Summary of Behavioral Studies			
Males who have Sex with Females and Females who have Sex with Males			
Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
PHREDA Project. (1993-94)	<p>KABB survey of 294 high-risk women recruited by outreach workers in the Bayview-Hunter's Point (24%), Tenderloin (32%), Mission (19%), and Haight Ashbury (25%) Data Collected 1993 - 1994.</p> <p>Afr-Amer 70% Asian / PI 7% Latina/Hisp. 8% Native Amer 1% White 12%</p>	<ul style="list-style-type: none"> • At last sexual intercourse: 46% used condoms 35% used nothing 9% used oral contraceptives • 24% almost never or never use birth control • Women were more likely to always use condoms with other partners than with primary partners (54% v. 19%) • 49% reported two or more partners in the last 6 months 	<p>The response rate for drug use was low: however, of those who reported use:</p> <ul style="list-style-type: none"> • 51% reported crack • 22% reported heroin use • 14% cocaine use
Samuel et al. (1991)	<p>San Francisco Men's Health Study: A population-based study that sampled single men ages 25-54 years residing in 19 census tracts of San Francisco that had the highest cumulative incidence of AIDS in 1983.</p> <p>Data represent changes in sexual practices over 5 years of follow-up among a sub-sample of 209 heterosexual men. Data Collected 1989.</p>	<ul style="list-style-type: none"> • This report indicates a decrease in high-risk sexual behavior among the sample • Heterosexual men in the sample significantly decreased their number of sexual contacts; % with 2 or more sexual partner in previous 6 months: 1984: 53% 1989: 41% • An increase in the use of condoms was reported; % reporting <u>any</u> condom use: 1984: 48% 1989: 61% 	

Summary of Behavioral Studies			
Males who have Sex with Females and Females who have Sex with Males			
Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Temple. (1993)	<p>Results from a survey of 1147 new intakes at a Contra Costa County Jail. The demographic characteristics resemble respondents in other justice system samples. No Date Given</p> <p>Afr-Amer 31% Latino/Hisp. 10% White 58% Other 1%</p> <p>Male 83%</p> <p>• 96% self-identified as heterosexual</p>	<ul style="list-style-type: none"> • 73% were in a primary relationship • 57% had two or more partners in past year • No difference found in frequency of sex between men and women; higher rates of sexual activity than the general population • Respondents in primary relationships were less likely to use condoms during sex (66% never used v. 46% in other relationships) • 77% of those in monogamous relationships reported never using condoms, compared to 53% in non-monogamous relationships • The distribution of sexual risk-taking did not differ significantly by gender or race 	<ul style="list-style-type: none"> • 22% drink alcohol daily • 29% have at least 5 drinks at a time at least once a week • Drug use in past year: <ul style="list-style-type: none"> Crack/Coke 30% Crank/Meth 31% Marijuana 53% Sedatives 11% Heroin/Meth 11% Other 17%
van der Straten et al. (1996)	<p>Examines safe sex behavior with primary and other partners among 48 heterosexuals in HIV-discordant couples. Data Collected 1992-1995</p>	<ul style="list-style-type: none"> • Among 48 couples, there were 115 other partnerships outside the primary relationship. The median number of other partners was 2 • Of these other partnerships: <ul style="list-style-type: none"> 38% had unprotected sex with another partner 27% had concurrent unprotected sex with primary partner 	

Summary of Behavioral Studies
Males who have Sex with Females and Females who have Sex with Males

Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Weinstock et al. (1993)	<p>300 heterosexual men and women enrolled in a cross-sectional study of patients attending San Francisco's only public sexually transmitted disease clinic.</p> <p>Race/Ethnicity (%)</p> <p>Men:</p> <p style="padding-left: 20px;">Afr-Am 43%</p> <p style="padding-left: 20px;">Hispanic 15%</p> <p style="padding-left: 20px;">White 35%</p> <p style="padding-left: 20px;">Other 8%</p> <p>Women:</p> <p style="padding-left: 20px;">Afr-Am 45%</p> <p style="padding-left: 20px;">Hispanic 6%</p> <p style="padding-left: 20px;">White 40%</p> <p style="padding-left: 20px;">Other 9%</p> <p>Data Collected 1989</p>	<ul style="list-style-type: none"> • 31% of men used condoms more than half the time with other and primary partners • 37% men and 48% women reported that their primary sex partners had definitely or possibly had sex with someone else during the previous 2 months • % received money or drugs for sex : Men: 5%; Women: 16% 	<ul style="list-style-type: none"> • Both men and women were more likely to have used drugs or alcohol w/sex more than half the time with their other partners than with their primary partners. <p>History of IDU (%)</p> <p style="padding-left: 20px;">Men: 10%</p> <p style="padding-left: 20px;">Women: 18%</p> <p>History of crack use (%)</p> <p style="padding-left: 20px;">Men: 32%</p> <p style="padding-left: 20px;">Women: 35%</p>
Woods et al. (in press)	<p>Associations between alcohol/drug use and HIV-related sexual risk behaviors were studied among 743 heterosexuals in alcohol treatment in San Francisco. No Date Given</p>	<ul style="list-style-type: none"> • Those more likely to use alcohol or drugs when having sex, and those who expect to have high-risk sex when they drink alcohol were more likely to engage in high-risk sexual behavior. 	

Exhibit 3.50

Summary of Behavioral Studies Populations Who Use Crack (All Sexual Risk Behavioral Groups)			
Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Booth et al. (1993)	<p>HIV risk-related sex behaviors among injections drug users, crack smokers, and injection drug users who smoke crack: multi-site study of drug users recruited in San Francisco (87), Denver (83), and Miami (76). Sampling was conducted in inner-city neighborhoods that had a high degree of injection drug use. Data Collected 1991</p> <p>Approx. 2/3 of sample were men</p> <ul style="list-style-type: none"> • 81 IDUs • 57 crack smokers • 108 smoking IDUS 	<ul style="list-style-type: none"> • 71% had sex in past 30 days; Mean number of sexual partners was 6; 44% reported multiple partners • Women averaged more sex partners than men (12 v. 3) • Crack smokers and smoking IDUs were more likely than IDUs to report they had two or more sex partners in past month • 52% of female smokers reported multiple sex partners • Smokers were less likely to have sex with a partner who was known to be an IDU (8%), compared to IDUs (32%) and smoking IDUs (38%) • Crack smokers (56%) and smoking IDUs (67%) were more likely to report having sex without condoms than IDUs (44%) • Crack smokers (37%) and smoking IDUs (41%) were also more likely to exchange drugs for sex or money than non-smoking IDUs (15%). 	<ul style="list-style-type: none"> • Crack smokers (58%) and smoking IDUs (60%) were more likely to use drugs during sex than IDUs (37%) • IDUs were more likely to be Latino; crack smokers were more likely to be African American • African American: <ul style="list-style-type: none"> 34% of IDUs 76% of smokers and 69% of smoking IDUs • Latino: <ul style="list-style-type: none"> 42% of IDUs 13% of smokers, and 11% of smoking IDUs • White: <ul style="list-style-type: none"> 24% of IDUs 11% of smokers, and 11% of smoking IDUs

Summary of Behavioral Studies
Populations Who Use Crack (All Sexual Risk Behavioral Groups)

Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Edlin et al. (1992)	High-risk sex behavior among young street-recruited crack cocaine smokers in three American cities. Cross sectional interview survey of 1,356 youth ages 19-20 in urban neighborhoods in SF(BVHP), New York and Miami. Data Collected 1991 Afr-Amer. 78% Latino 18%	<ul style="list-style-type: none"> • The crack smokers in this sample engaged in higher-risk sex behaviors than the nonsmokers. This difference was particularly evident among the participants who had never injected drugs • Crack smokers were more likely than nonsmokers to report exchanging sex for money or drugs, having had more sex partners, and ever having a STD • Condom use was generally infrequent, regardless of sex or drug use history • Less than one-third (28%) used condoms consistently and just over one-third (36%) of the sample used a condom when they last had sex 	
Edlin et al. (1996)	2,323 crack smokers and non-smokers, ages 18-29, recruited from inner-city streets in San Francisco, New York, and Miami. No Date Given	<ul style="list-style-type: none"> • 56% of female crack smokers in SF exchanged sex for money or drugs; 29% did not use a condom; median number of sex partners 20 • 20% of non-injecting crack smokers had sex with an IDU • 8% of male crack smokers had anal sex with men 	

Summary of Behavioral Studies
Populations Who Use Crack (All Sexual Risk Behavioral Groups)

Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Schumacher. (1996)	Risk factors among 23 crack using African American women in residential drug treatment. No Date Given	<ul style="list-style-type: none"> • 90% had 3 or more sexual partners in the past year; 40% had 5 or more partners. Mean number of partners in the past 3 months was 7.3, with a range of 0-56 • 70% had unprotected sex with an unfamiliar partner • 10% had unprotected sex with an IDU • 26% reported using a condom during vaginal sex • 87% traded sex for crack • 57% reported inconsistent condom use during sex while using cocaine 	
Schumacher et al. (1996)	<p>Risk factors and gender differences among 75 crack-abusing or dependent clients during the 6 months prior to treatment. No Date Given</p> <p>Male: 76% African-Amer: 61%</p>	<ul style="list-style-type: none"> • 78% reported sex after smoking crack, with condoms used "sometimes" • Average number of sexual partners during last 6 months was 5.1 (72% of those were also crack-smoking partners) • Women reported more sex after smoking crack (1-2 times per week) than men (2-3 times per month) • 70% reported trading sex for crack and crack for sex, with condoms used "sometimes" • During the past 6 months, women were more likely to trade sex for crack (mean 11.6 times) than men (mean .35 times) 	Frequency of crack smoking averaged 3-4 times per week.

Summary of Behavioral Studies Populations Who Use Crack (All Sexual Risk Behavioral Groups)			
Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Schwarcz et al. (1992)	<p>68 African American adolescents diagnosed with gonorrhea were compared to 136 control subjects from the same community to analyze crack cocaine and the exchange of sex for money or drugs as risk factors for STDs. Data Collected 1986-1988</p> <p>All were self identified as heterosexual</p>	<p>Females:</p> <ul style="list-style-type: none"> • 31% of the gonorrhea patients reported receiving money or drugs for sex, but none of the controls reported this behavior • Mean number of partners among patients was significantly higher than among control subjects <p>Males:</p> <ul style="list-style-type: none"> • The differences between patients and controls observed for females was not apparent for males 	<p>Females:</p> <ul style="list-style-type: none"> • Crack cocaine use was reported more often by gonorrhea patients than control subjects • Alcohol and marijuana use in the past month were reported more often by patients than control subjects • Crack use was reported by 89% (8/9) patients who received money or drugs for sex, compared with 11% (2/19) patients and 6% (4/65) control subjects who denied receiving money or drugs for sex

Exhibit 3.51

Summary of Behavioral Studies Sex Workers (All Sexual Behavioral Risk Groups)			
Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Kail et al. (1995)	Analysis of 9,055 drug-addicted women not in treatment to identify needle-using practices of women in the sex industry. No Date Given		<ul style="list-style-type: none"> • Women who trade sex for money and/or drugs are less likely to use new needles on a consistent basis or to clean old needles. They are more likely to share than women not engaging in commercial sex.
Dorfman et al. (1992)	<p>Women in the Sex Industry: Interviews with 182 women who were sex workers. Over-representation of African American women reflects outreach and recruitment efforts aimed at African American neighborhoods known for high drug, crack use and prostitution Data Collected 1989-1990</p> <p>Ethnicity: Afr-Amer: 74% Latina: 6% Native Amer: 4% White: 17%</p>	<ul style="list-style-type: none"> • 94% always or sometimes used condoms w/ clients but only 25% did so with their personal partners (this pattern remained for HIV- and syphilis-infected women) • 72% said they feel they are at risk for getting AIDS • Most women felt that changing behavior with personal partners is more difficult than changing behavior w/commercial partners • Women displayed the intention to reduce AIDS risk most often with clients rather than personal partners 	<ul style="list-style-type: none"> • 66% used crack • Syphilis was most prevalent among women who used crack exclusively (23% infected) • 39% of cohort had injected drugs • 11 of the 14 women who were HIV positive had injected drugs
Elifson et al. (1993)	53 transgender (MTF) prostitutes were recruited in Atlanta; sample was more than 80% African American Data Collected July 1990-July 1991	<p>With clients: 77% engaged in receptive anal sex; 95% reported "sometimes" using a condom.</p> <p>With personal partner: 47% engaged in receptive anal sex; 76% reported "sometimes" using a condom.</p>	66% reported crack use

Summary of Behavioral Studies Sex Workers (All Sexual Behavioral Risk Groups)			
Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Edlin et al. (1996)	2,323 crack smokers and non-smokers, ages 18-29, recruited from inner-city streets in San Francisco, New York, and Miami. No Date Given	<ul style="list-style-type: none"> • 56% of female crack smokers in SF exchanged sex for money or drugs; 29% did not use a condom; median number of sex partners 20 • 20% of non-injecting crack smokers had sex with an IDU • 8% of male crack smokers had anal sex with men 	
Bloch et al. (1996)	Risk behaviors associated with HIV among non-IDU female street prostitutes in New York City. No Date Given	<ul style="list-style-type: none"> • Performing fellatio as often as vaginal intercourse and high frequency of performing fellatio at work had significant associations with HIV infection. 	

BEHAVIORAL STUDIES BY YOUTH AND ETHNICITY

HIV prevention planning in San Francisco is based on behavioral risk populations, and the previous tables and narratives have synthesized behavioral research findings by behavioral groups. However there is a valuable body of research that cannot be fit into the behavioral risk population approach. This section briefly outlines this research. It must be stressed that the previous section contained information about findings specific to ethnicity and youth where available. The following analyses of behavioral studies according to age and ethnicity were initially developed for the first year Plan (1995), and have been updated for this version. As with the summaries by behavioral risk population, the summaries by age and ethnicity contain a narrative followed by a table of key research findings for each group.

Behavioral Summaries Among Youth

Adolescence is a developmental landmark when many young people initiate their sexual lives and experiment with alcohol and drug use. Many factors contribute to the risk for HIV infection that accompanies youths' initial involvement in sexual and drug use activities. This summary discusses behavioral studies that have focused on youth as a target age group. Other studies which include youth in the sample are not summarized here. Instead, they are discussed in the section on the relevant behavioral risk population. For example, studies that include young males who have sex with males can be found in the MSM and MSM/F section.

Although adolescents share certain experiences and changes common to their developmental phase, behavioral differences translate to varying levels of risk for HIV infection. In San Francisco, youth populations are commonly distinguished based on their school status, i.e., whether or not they are in school. Thus, some studies consider the risk behaviors of in-school youth, while others focus on runaway youth, homeless youth, and youth in institutional settings (e.g. incarcerated, in-patient treatment) or who are accessing services from public clinics. These distinctions are useful to the extent that they are proxies for a continuum of risk for HIV: youth in traditional school settings are generally in more stable situations (correlating with a lower degree of involvement in HIV risk behaviors) compared to incarcerated, runaway, and homeless youth, who are in more vulnerable circumstances (correlating with a higher degree of involvement in HIV risk behaviors).

The following summary presents data on all San Francisco youth populations, including youth in traditional schools, institutional (i.e., incarcerated or clinic) settings, and those runaway and homeless youth who live on the streets, in shelters, or in other unstable living situations. By providing drug- and alcohol-related risk behavior and sexual risk behavior data on these populations together, comparisons of degree of HIV risk may be made more readily.

Drug- and Alcohol-Related Risk Behavior of Youth

Various behavior including drug and alcohol use put youth at risk for HIV infection. While injection drug use is a primary and direct means of HIV transmission, use of alcohol and drugs during sex often predicts unsafe behavior, such as intercourse without the use of condoms or other protection. Furthermore, behavioral data on youth alcohol and drug use are helpful for providers, as they often predict involvement in other high-risk behaviors such as commercial sex and sex with multiple partners.

Injection drug use behavior among youth in San Francisco schools has been assessed in several studies with generally consistent findings: approximately 2% of in-school youth either currently engage in injection drug use or have done so at some time in their lives (Kann et al., 1996; Horan and DiClemente, 1993). The proportions of youth who inject drugs among those recruited for studies at clinical or institutional settings are slightly higher than proportions for the in-school youth population. In a study comparing youth in a San Francisco in-patient psychiatric facility with in-school youth, DiClemente and Ponton (1993) found that 9% of the youth in the psychiatric institution had ever injected drugs (100% of whom also reported sharing needles) compared to 4% of the general student population (66% of whom reported sharing needles). Moscicki et al. (1993) found, in a large sample of youth accessing service at San Francisco Planned Parenthood clinics, that 3% had engaged in injection behavior. Comparing incarcerated youths' and in-school youths' injection behaviors, DiClemente et al. (1991) found proportions of 13% and 4%, respectively, reporting a history of injection drug use.

Among San Francisco youth populations, the rate of injection drug use is highest for runaway and homeless youth. In a recent study by Clements and colleagues (in press) reporting on the risk behaviors of street youth ages 12-24 recruited from street-based settings in four Northern California cities, 32% reported ever injecting drugs. Of these, 47% report current injection drug use, 66% of whom reported sharing cottons, cookers, or water, and 65% of whom reported sharing needles or syringes. Of the youth who reported sharing needles, 72% reported using bleach the last time they shared. In a multi-site study of runaway and homeless youth under the age of 19 years recruited from street (35%) and agency (65%) settings in San Francisco, Denver, and New York City, Kral and colleagues (in press) found that 21% of the overall sample had ever injected drugs and 15% currently do so. Of these youth, 62% recently shared needles, 70% of whom always used bleach. Importantly, Kral and colleagues also found that lifetime injection drug use was highest among the San Francisco sub-sample (43% vs. 21% overall) as well as current injection drug use (35% vs. 15% overall). Other studies (Sherman, 1992; Goodman and Berecochea, 1994) found that between 15% and 19% injected drugs at the time of the study, and that between 27% and 33% reported having injected drugs at some point in their lives.

Alcohol and drug use during sex among in-school youth has been assessed in several studies. In the national study of high school students' risk behaviors, Kann et al. (1996) found that 16% of their San Francisco sample used alcohol or drugs the last time they had sexual intercourse. In another study in San Francisco high schools, DiClemente and Brown (1993) found that 25% of those who drink report having unprotected sex while drunk.

Rates of non-injection substance use among San Francisco's runaway and homeless youth are known to be significantly higher than their homeful counterparts. Among Clements and colleagues' (in press) Bay Area street-recruited sample, 54% at the time of study participation and 89% had ever in their lifetime used marijuana; 25% currently (80% ever) used alcohol; 46% currently (95% ever) used LSD; 13% currently (70% ever) used cocaine; 35% currently (70% ever) used speed; 25% currently (42% ever) used crack; and 20% currently (43% ever) used heroin. Similarly high proportions of Kral et al.'s (in press) study sample used non-injection substances: 97% reported ever having used some drug or alcohol in their lifetime and 89% reported having used some drug or alcohol in the three months prior to study participation. Additionally, 40% had ever used crack, a proportion similar to Clement and colleagues' finding, yet significantly higher than the proportion found for their overall sample of runaway and homeless youth in three study sites (San Francisco, Denver, New York City) (Kral et al., in press).

Sexual Risk Behaviors

High rates of sexual activity, early age of sexual debut, multiple sexual partners, and not using protection during sexual encounters are indicators of HIV risk for San Francisco youth. Behavioral data for each of these indicators are presented for in-school youth, youth accessed in clinical and institutional settings, and runaway and homeless youth. Studies of sexual risk behaviors conducted with youth accessed in clinical or institutional settings demonstrate that generally higher proportions of these youth, compared to the general in-school youth population, engage in sexual risk behaviors. Moreover, studies of runaway and homeless youths' involvement in sexual risk behaviors clearly indicate these youth are at highest risk for HIV infection.

Proportions of Sexually Active Youth

Most sexual behavior assessments of San Francisco in-school youth find that between 20% and 32% of these youth are sexually active overall. Studies finding proportions close to 20% of sexually active youth include Kann et al. (1996), Shafer and Boyer (1991), and Durbin et al. (1993), whereas DiClemente and Brown (1993) found the higher proportion of 32%. Millstein and colleagues (1992) noted a significant gender difference among adolescents aged 11 to 14 years old from an inner-city, public middle school; although 21% were sexually active overall, 35% of boys were sexually active compared to 8% of girls.

Data on youth accessed in clinical and institutional settings show that higher proportions of these youth are sexually active compared to the general in-school youth population. In a small study of youth in an in-patient psychiatric setting, DiClemente and Ponton (1993) found that 53% were sexually active. As reported in DiClemente et al. (1991) and DiClemente (1991), virtually all—99%—of the youth surveyed in San Francisco's juvenile detention center (Youth Guidance Center, YGC) were sexually active.

Runaway homeless youth are also sexually active in higher proportions compared to their in-school counterparts. Clements and colleagues (in press) found that among a large sample of street-recruited youth that 61% were sexually active in the past 30 days. In Kral and colleagues' (in press) large study of runaway homeless youth in three cities, 98% overall reported they had ever been sexually active and 87% reported they were sexually active in the three months prior to being interviewed. Studies by Sherman (1992) and Goodman and Berecochea (1994) of San Francisco street youth found similar results; respectively, 90% and 91% of the youth in these samples were sexually active. The gender difference in proportions of sexually active youth noted above for in-school youth has not been found among populations of runaway and homeless youth.

Age of Sexual Debut

Early age of sexual debut—typically defined as beginning agreed upon sexual activity before the age of 13 years old—has been associated with multiple partners among youth populations (Durbin et al., 1993). In their sample of high school students, Kann et al. (1996) found that 10% of males and 3% of females had their sexual debut before the age of 13 years. Other studies have found higher proportions, such as 17% (DiClemente and Brown, 1993), 43% (Millstein et al., 1992), and 62% (Durbin et al., 1993).

Significant proportions of San Francisco youth sampled in clinical and institutional settings also had their first sexual experience at an early age. One-half of the youth in DiClemente and Ponton's (1993) sample of young people in in-patient psychiatric treatment had their first sexual experience before the age of 12 years. Similarly, DiClemente et al. (1991) and DiClemente (1991) report that 52% of the youth sampled at San Francisco's YGC had their sexual debut at the age of 12 or younger.

Researchers reporting on street youth have described the mean age of sexual debut, with remarkably similar findings across studies. Kral and colleagues' (in press) report a mean age of sexual debut of 13.9 years for males and 12.9 years for females. Similarly, Sherman (1992) found a mean age of sexual debut for his total sample of San Francisco runaway homeless youth of 13.5 years, while Goodman and Berecochea (1994) report a mean age of sexual debut of 13 years.

Multiple Sexual Partners

The proportion of San Francisco in-school youth who have multiple sexual partners is reported in several studies. The study by Durbin et al. (1993) of Northern California inner-city junior high school students found that of the sexually active youth, 26% reported two lifetime sexual partners, 22% reported three to five, and 21% reported six or more lifetime sexual partners. Kann and colleagues' (1996) large study of high school students provides more conservative findings: 13% of males and 8% of females reported four or more lifetime sexual partners. DiClemente and Brown (1993) reported that within the past year, 44% of their high school student sample had more than two partners.

Compared to the general in-school youth population, higher proportions of youth sampled in clinical and institutional settings have multiple sexual partners. In the 1992 San Francisco City Clinic KABB Survey, 42% of the youth sampled reported having two or more sexual partners in the past three months. Moscicki et al. (1993) found that among youth attending a Planned Parenthood clinic in San Francisco, a UCSF clinic, or a public health clinic in Oakland, 40% of females and 70% of males had four or more lifetime sexual partners. Of the sexually active males attending a clinic in a San Francisco youth detention center, 68% had two or more sexual partners in past three months (Shafer et al., 1993). Also reporting on incarcerated youth, DiClemente et al. (1991) and DiClemente (1991) found that 73% reported having two or more sexual partners in the past year. Lastly, DiClemente and Ponton (1993) report that 63% of their sample of youth in psychiatric treatment had multiple lifetime sexual partners.

The studies of runaway, homeless youths' sexual risk behaviors for which summary tables are provided do not include statistics on multiple sexual partners. However, many studies discuss the prevalence of subsistence through commercial sex (Sherman, 1992; Clements et al., in press; Kennedy, 1991; Kral et al., in press) and assume that it is understood that the proportion of runaway, homeless youth who have multiple sexual partners is high.

Condom Use

Study findings generally indicate that at least one-third of sexually active youth in San Francisco do not use condoms consistently. In the large, representative sample, Kann et al. (1996) found that during their last sexual encounter, 29% of males and 44% of females did not use protection. Thirty percent (30%) of DiClemente and Brown's (1993) high school sample had unprotected sex and 36% of DiClemente and colleagues' (1993) junior high school sample reported having unprotected sex. Higher proportions of unprotected sex are reported by Millstein and her colleagues (1992) (51%) and Shafer and Boyer (1991) (68%).

The San Francisco City Clinic KABB Survey (1992) found that 25% of sexually active youth reported never using condoms in the past 12 months. In Moscicki et al.'s (1993) clinic-based study, 56% of females and 67% of males had unprotected sex with new partners and of those who reported anal sex, 88% of females and 79% of males did not use consistent protection. Considering incarcerated youth, Shafer and colleagues found that 78% overall did not use condoms consistently and DiClemente et al.'s (1991) and DiClemente's (1991) studies found that 71% reported having unprotected sex. Similarly, DiClemente and Ponton (1993) found that of the adolescents they interviewed at an in-patient psychiatric clinic in San Francisco, 78% reported inconsistent condom use during sex, with 45% never using protection.

Given that runaway, homeless youth are a high-risk population for HIV infection, most studies assess condom use in relation to specific sex acts and with specific sexual partner types. For summary purposes, much of this detail is omitted here. Clements and her colleagues (in press) report of their large sample of Northern California street youth, 77% did not use a condom consistently when they had vaginal sex in the past 30 days. Kral et al. (in press) found that 66% of females and 53% of males did not use condoms consistently when they had vaginal

sex in the three months prior to study participation. Similarly, Goodman and Berecochea (1994) report that 83% of females and 69% of females did not consistently use condoms during vaginal sex. Studies conducted on youths are listed under Exhibit 3.52 beginning on the following page.

Exhibit 3.52

Summary of Behavioral Studies Youth (All Behavioral Risk Populations)			
Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Clements et al. (in press)	<p>429 street youth ages 12-24 recruited from 4 No. CA cities</p> <p>68% Male 75% currently homeless 85% Heterosexual No Date Given</p> <p>Ethnicity: 2% Af-Am 1% Asian/PI 3% Latino/a 2% Native Am 77% White 14% Other</p>	<ul style="list-style-type: none"> • 61% sexually active • 11% had ever engaged in commercial sex • 20% ever had an STD • 52% had vaginal sex in past 30 days w/ primary partner only • 40% had vaginal sex in past 30 days w/ other partner type only • 8% had vaginal sex in past 30 days w/ both partner types <p>Reported condom use during vaginal sex in past 30 days:</p> <ul style="list-style-type: none"> • 23% used a condom every time • 43% used a condom last time • For sexually active females, current homelessness (OR=0.3), sex with a non-primary partner (OR=2.98), and positive condom experiences (OR=3.95) were associated with increased likelihood of using condom during last vaginal sex • For sexually active males, carrying condoms (OR=4.61), getting condoms recently (OR=3.86), positive perception of peer condom use norms (OR=2.61), and daily marijuana use (OR=0.36) were associated with increased likelihood of using condom during last vaginal sex 	<ul style="list-style-type: none"> • 32% reported ever injecting drugs; of these, 47% report current IDU • Age 19+ yrs (OR=2.02), current homelessness (OR=3.65), daily alcohol use (OR=2.5), and subsistence via commercial sex or drug culture (OR=1.91) associated with increased likelihood of IDU. <p>Reported current (ever) drug use:</p> <ul style="list-style-type: none"> • 54% (89%) used marijuana • 25% (80%) used alcohol • 46% (95%) used LSD • 13% (70%) used cocaine • 35% (70%) used speed • 25% (42%) used crack • 20% (43%) used heroin • Of those who injected in the past 30 days, 66% reported sharing cottons, cookers, or water and 65% reported sharing needles or syringes • Of youth who reported sharing needles, 72% reported using bleach the last time they shared

Summary of Behavioral Studies Youth (All Behavioral Risk Populations)			
Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
DiClemente (1991)	<p>Survey of 112 adolescents at SF juvenile detention facility (YGC)</p> <p>Study purpose: to investigate predictors of condom use No Date Given</p> <p>76% Male</p> <p>Ethnicity: 65% Af-Am 6% Asian/PI 10% Latino/a 11% White 8% Other</p>	<ul style="list-style-type: none"> • 99% were sexually active • 73% reported 2+ partners in the past year • 84% reported 3+ lifetime partners • 52% had their sexual debut at 12 yrs of age or younger • 29% always use condoms 	
DiClemente et al. (1993)	<p>796 students in 9 SF high schools No Date Given</p> <p>54% Female</p> <p>Ethnicity: 12% Af-Am 56% Asian/PI 11% Latino 15% White 7% Other</p>	<ul style="list-style-type: none"> • 32% sexually active • 17% had sexual debut at 12 yrs or younger • 44% had more than 2 partners in past yr • 30% had unprotected sex 	<ul style="list-style-type: none"> • 25% of those who drink report having unprotected sex while drunk on alcohol

**Summary of Behavioral Studies
Youth (All Behavioral Risk Populations)**

Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
DiClemente et al. (1993)	<p>76 adolescents interviewed at an in-patient psychiatric clinic in SF. Data Collected 1988 and 1989.</p> <p>Study findings were compared with a sample of 802 adolescents in SF schools</p> <p>Study sample and comparison group demographics are not provided</p>	<p>Comparative reported sexual behavior of study sample and comparison group, respectively:</p> <ul style="list-style-type: none"> • 53% vs. 29% sexually active • 63% vs. 52% reported having multiple sex partners • 45% vs. 25% never used protection during sex <p>Of the study sample:</p> <ul style="list-style-type: none"> • 50% had their sexual debut at age 12 or younger • 78% reported unprotected sex • 20% reported homosexual experience • 20% reported having sex with an IDU partner 	<p>Comparative reported drug use behavior of study sample and comparison group, respectively:</p> <ul style="list-style-type: none"> • 9% vs. 4% reported IDU • 100% vs. 66% reported sharing needles
DiClemente et al. (1993)	<p>403 sexually active SF junior high school students No Date Given</p> <p>64% Male</p> <p>Ethnicity: 58% Af-Am 10% Asian/PI 21% Latino/a 6% White 6% Other</p>	<ul style="list-style-type: none"> • 36% reported having unprotected sex 	

**Summary of Behavioral Studies
Youth (All Behavioral Risk Populations)**

Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
DiClemente et al. (1991)	<ul style="list-style-type: none"> • 113 incarcerated youth from SF's Youth Guidance center were surveyed. No Date Given • Study sample data were compared to data on 802 students from 9 SF high schools 	<p>Comparison of incarcerated youths' vs. school-based youths' sexual behaviors, respectively:</p> <ul style="list-style-type: none"> • 99% v. 28% were sexually active • 73% v. 8% had 2+ partners in the past year • 84% v. 15% had 3+ lifetime partners • 52% v. 26% had sexual debut at 12 yrs of age or younger • 71% v. 63% had unprotected sex 	<p>Comparison of incarcerated youths' vs. school-based youths' IDU behaviors, respectively:</p> <ul style="list-style-type: none"> • 13% v. 4% reported a history of IDU
Durbin et al. (1993)	<ul style="list-style-type: none"> • 403 inner-city junior high school students in No. CA. No Date Given <p>36% Female</p> <p>Ethnicity:</p> <ul style="list-style-type: none"> 58% African-Am 11% Asian/PI 21% Latino 6% White 6% Other 	<p>Of the 21% sexually active youth:</p> <ul style="list-style-type: none"> • 62% reported sexual debut before age 13 • 63% had unprotected sex • 31% reported 1 sexual partner • 26% reported 2 sexual partners • 22% reported 3-5 lifetime sexual partners • 21% reported 6 or more partners • Factors associated with more than 3+ partners include: male gender, Af-Am ethnicity, and sexual debut before 13 yrs 	<p>Of the total sample:</p> <ul style="list-style-type: none"> • 31% reported drinking alcohol in the past month <p>Of the sexually active sub-sample:</p> <ul style="list-style-type: none"> • 52% reported drinking alcohol in the past month

**Summary of Behavioral Studies
Youth (All Behavioral Risk Populations)**

Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Goodman et al. (1994)	<p>Analysis of secondary data on 202 SF Bay Area runaway, homeless youth ages 13-18 yrs. Data Collected 1990-1991</p> <p>62% were sampled from shelters vs. 38% from street locations</p> <p>47% Female</p> <p>Ethnicity: 8% Af-Am 2% Asian/PI 11% Latino/a 4% Native Am 61% White 16% Other</p> <p>80% 16-18 yrs old 82% Heterosexual</p>	<ul style="list-style-type: none"> • There were no significant differences in sexual risk behaviors between shelter and street populations • Mean age of sexual debut was 13 yrs old • 91% were sexually active • 91% had vaginal sex • 14% overall reported having unprotected vaginal sex • 31% of males reported always using condoms during vaginal sex compared to 17% of females • 19% of males reported insertive anal sex • 13% overall reported receptive anal sex (48% were males) • 79% of females reporting receptive anal sex did not use protection • 46% of males reporting receptive anal sex did not use protection • 8% engaged in commercial sex 	<ul style="list-style-type: none"> • Overall, 27% reported ever IDU; 19% reported IDU in past 6 months • 33% of shelter respondents vs. 18% of street-based respondents reported IDU • 14% reported ever sharing needles • 11% reported sharing needles with a sex partner • 94% reported having used any drug • 99% reported having used alcohol • 29% reported having used crack

Summary of Behavioral Studies Youth (All Behavioral Risk Populations)			
Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
High School Youth Behavior Risk Survey. SFUSD 1993.	<p>2,753 SF high school students. Data Collected 1993</p> <p>52% Female</p> <p>Ethnicity: 15% Af-Am 41% Asian/PI 17% Latino/a 13% White 12% Other</p>	<p>Of the 40% sexually active youth:</p> <ul style="list-style-type: none"> • 20% had sexual debut before age 12 yrs. • 39% had sex in past 3 months. <p>Of those who had sex in the past 3 months:</p> <ul style="list-style-type: none"> • 31% had 2 or more partners. <p>During the last sexual encounter:</p> <ul style="list-style-type: none"> • 20% used alcohol and/or other drugs the last time they had sex. • 40% had unprotected sex. 	<ul style="list-style-type: none"> • 16% drank alcohol heavily in the last 30 days • 19% used marijuana at least once in the last 30 days • 3% used some form of cocaine in the last 30 days • 2% injected drugs at least once
Horan et al. (1993)	<p>1,272 10th and 11th grade SF high school students. No Date Given</p> <p>Only students who identified as Chinese, Filipino, or White were included in sample</p> <p>Ethnicity: 47% Chinese 16% Filipino/a 9% White</p>	<p>Percent sexually active, by ethnicity:</p> <ul style="list-style-type: none"> • 13% of Chinese students • 32% of Filipino/a students • 37% of White students <p>• Among sexually active students, no racial/ethnic differences were found for the total sexual behavior risk index</p> <ul style="list-style-type: none"> • Chinese students were less able to communicate with others about HIV disease and prevention • Chinese and Filipino students had fewer misconceptions, but Whites had higher knowledge of prevention 	<ul style="list-style-type: none"> • 2.1 % overall reported using injection drugs; by ethnicity: 2.2% of White students, 3.3% of Filipino students, and 1.4% of Chinese students

Summary of Behavioral Studies Youth (All Behavioral Risk Populations)

Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Institute for Health Policy Studies, UCSF. (1995)	<p>These data on 775 street youth in 3 cities (SF, Denver, NYC) are also presented in Kral et al. (in press).</p> <p>This report includes intervention outcome data, but only population behavioral data are presented here.</p> <p>Data on 775 runaway, homeless youth under age 19 yrs recruited from street (35%) and agency (65%) settings in SF (n=305, 39%), Denver (n=244, 31%), and NYC (n=226, 29%). Data Colecte 1992-1994</p> <p>65% Male</p> <p>Ethnicity: 26% Af-Am 14% Latino/a 3% Native Am 55% White 3% Other 90% 15+ yrs old</p> <p>SF and Denver demos did not differ; NYC had more males, Af-Ams, fewer Whites, and were older overall</p>	<ul style="list-style-type: none"> • Overall, 98% reported they had ever been sexually active • 87% reported they were sexually active in 3 mos prior to interview • Mean age of sexual debut was 13.9 yrs for males and 12.9 yrs for females <p>Sexual behaviors among females:</p> <ul style="list-style-type: none"> • Of the 97% who ever had vaginal sex, 85% had it in past 3 mos; of these, 66% did not use condoms consistently • Of the 21% who had ever received anal sex, 57% had it in past 3 mos; of these, 70% did not use condoms consistently • 36% of sexually active females had engaged in commercial sex; of these, 70% did not use condoms consistently • 77% ever had sex while drunk or high on drugs • 40% ever had sex with an IDU partner <p>Sexual behaviors among males:</p> <ul style="list-style-type: none"> • Of the 89% who ever had vaginal sex, 82% had it in past 3 mos; of these, 53% did not use condoms consistently • Of the 28% who ever performed insertive anal sex, 70% had it in past 3 mos; of these, 40% did not use condoms consistently • Of the 14% who had ever received anal sex, 71% had it in past 3 mos; of these, 27% did not use condoms consistently • 40% of sexually active males had engaged in commercial sex; of these, 63% did not use condoms consistently • 74% ever had sex while drunk or high on drugs • 26% ever had sex with an IDU partner 	<p>Overall reported drug use:</p> <ul style="list-style-type: none"> • 97% reported ever having used some drug or alcohol • 89% reported having used some drug or alcohol in past 3 mos • 28% ever used crack • 21% ever IDU • 15% current IDU • 62% recently shared needles; of these, 70% always used bleach <p>SF-specific notes:</p> <ul style="list-style-type: none"> • lifetime crack use higher (40% in SF v. 28% overall) • lifetime IDU higher (43% in SF v. 21% overall) • current IDU higher (35% in SF v. 15% overall)

Summary of Behavioral Studies Youth (All Behavioral Risk Populations)

Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Kann et al. (1996)	<p>Nationally representative school-based sample of over 10,000 high school students</p> <p>CDC's 1995 Youth Risk Behavior Survey (with SFUSD). Data Collected 1995</p> <p>Results are provided by city: San Francisco results only are presented here</p> <p>San Francisco sample</p> <p>49.9% Female</p> <p>Ethnicity: 13.6% Af-Am 14.9% Latino/a 8.3% White 63.2% Other</p>	<p>SF Males:</p> <ul style="list-style-type: none"> • 20% currently sexually active • 10% had sexual debut before age 13 yrs • 13% had 4+ lifetime sexual partners • 71% used a condom during last sexual intercourse • 20% used alcohol or drugs during last sexual intercourse <p>SF Females:</p> <ul style="list-style-type: none"> • 26% currently sexually active • 3% had sexual debut before age 13 yrs • 8% had 4+ lifetime sexual partners • 56% used a condom during last sexual intercourse • 16% used alcohol or drugs during last sexual intercourse 	<p>Reported current (ever) drug use among SF males:</p> <ul style="list-style-type: none"> • 26% (58%) used alcohol • 19% (33%) used marijuana • 3% (6%) used cocaine • 5% ever used crack • 2% ever IDU <p>Reported current (ever) drug use among SF females:</p> <ul style="list-style-type: none"> • 27% (58%) used alcohol • 17% (29%) used marijuana • 2% (6%) used cocaine • 4% ever used crack • 1% ever IDU

**Summary of Behavioral Studies
Youth (All Behavioral Risk Populations)**

Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Kennedy. (1991)	<p>100 youth who received case management services at SF's Larkin Street Youth Center for runaway, homeless youth. Data Collected 1988-1989</p> <p>63% Female</p> <p>Ethnicity: 13% Af-Am 3% Asian/PI 13% Latino/a 68% White</p> <p>79% Heterosexual 78% from outside SF area, 38% from outside CA</p> <p>Mean age=16 yrs</p>	<ul style="list-style-type: none"> • 60% reported no history of commercial sex • 30% were sexually abused; 62% reported multiple abuse before leaving home 	<p>Reported current drug use:</p> <ul style="list-style-type: none"> • 81% any drug/alcohol use • 72% used marijuana • 40% used speed • 37% used crack • 42% used cocaine • 42% used hallucinogens • 16% used PCP • 15% used heroin

**Summary of Behavioral Studies
Youth (All Behavioral Risk Populations)**

Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Kral et al. (in press)	<p>Data on 775 runaway, homeless youth under age 19 yrs recruited from street (35%) and agency (65%) settings in SF (n=305, 39%), Denver (n=244, 31%), and NYC (n=226, 29%). Data Collected 1992-1995</p> <p>65% Male</p> <p>Ethnicity: 26% Af-Am 14% Latino/a 3% Native Am 55% White 3% Other 90% 15+ yrs old</p> <p>SF and Denver demos did not differ; NYC had more males, Af-Ams, fewer Whites, and were older overall</p>	<ul style="list-style-type: none"> • Overall, 98% reported they had ever been sexually active • 87% reported they were sexually active in 3 mos prior to interview • Mean age of sexual debut was 13.9 yrs for males and 12.9 yrs for females <p>Sexual behaviors among females:</p> <ul style="list-style-type: none"> • Of the 97% who ever had vaginal sex, 85% had it in past 3 mos; of these, 66% did not use condoms consistently • Of the 21% who had ever received anal sex, 57% had it in past 3 mos; of these, 70% did not use condoms consistently • 36% of sexually active females had engaged in commercial sex; of these, 70% did not use condoms consistently • 77% ever had sex while drunk or high on drugs • 40% ever had sex with an IDU partner <p>continued on next page...</p>	<p>Overall reported drug use:</p> <ul style="list-style-type: none"> • 97% reported ever having used some drug or alcohol • 89% reported having used some drug or alcohol in past 3 mos • 28% ever used crack • 21% ever IDU • 15% current IDU • 62% recently shared needles; of these, 70% always used bleach <p>SF-specific notes:</p> <ul style="list-style-type: none"> • lifetime crack use higher (40% in SF vs. 28% overall) • lifetime IDU higher (43% in SF vs. 21% overall) • current IDU higher (35% in SF vs. 15% overall)

Summary of Behavioral Studies Youth (All Behavioral Risk Populations)			
Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
		<p>continued from previous page...</p> <p>Sexual behaviors among males:</p> <ul style="list-style-type: none"> • Of the 89% who ever had vaginal sex, 82% had it in past 3 mos; of these, 53% did not use condoms consistently • Of the 28% who ever performed insertive anal sex, 70% had it in past 3 mos; of these, 40% did not use condoms consistently • Of the 14% who had ever received anal sex, 71% had it in past 3 mos; of these, 27% did not use condoms consistently • 40% of sexually active males had engaged in commercial sex; of these, 63% did not use condoms consistently • 74% ever had sex while drunk or high on drugs • 26% ever had sex with an IDU partner 	

Summary of Behavioral Studies Youth (All Behavioral Risk Populations)			
Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Millstein et al. (1992)	<p>563 adolescents aged 11-14 yrs from an inner-city, public middle school.</p> <p>Study purpose: general health assessment. Data Collected 1986</p> <p>52% Female</p> <p>Ethnicity: 18% Af-Am 17% Asian/PI 14% Latino 29% White 22% Mixed</p>	<ul style="list-style-type: none"> • 21% were sexually active • 35% of boys and 8% of girls were sexually active • 50% of Af-Am; 23% of Latino/a, 11% of White & 8% of Asian/PI youth were sexually active. • 43% had sexual debut prior to 11 yrs. • 51% reported unprotected sex • 5% reported having had an STD 	<p>Reported drug use:</p> <ul style="list-style-type: none"> • 56% tried cigarettes • 73% tried alcohol • 31% tried marijuana • 5% tried cocaine
Moscicki et al. (1993)	<p>878 adolescents attending a Planned Parenthood clinic in SF, a UCSF clinic, or a public health clinic in Oakland, CA. No Date Given</p> <p>76% Female</p> <p>Ethnicity: Oakland Clinic Youth were 94% Af-Am</p> <p>Youth from other clinics were: 16% Af-Am 8% Asian/PI 19% Latino/a 49% White 10% Other</p> <p>Mean age= 17 yrs</p>	<ul style="list-style-type: none"> • 40% of females and 70% of males had 4 or more lifetime partners • 56% of females and 67% of males had unprotected sex w/ new partners • 20% of females and 27% of males reported engaging in heterosexual anal sex • Of those who reported anal sex, 88% of females and 79% of males did not use protection • 7% of females and 7% of males reported some type of homosexual experience 	<p>Reported drug use:</p> <ul style="list-style-type: none"> • 57% of females and 53% of males reported moderate to heavy alcohol use • 30% of the overall sample reported moderate to heavy marijuana use • 3% of the overall sample reported injection drug use • 29% of females and 13% of males reported combining alcohol use with sex • 13% of females and 17% of males reported combining drugs w/ sex

Summary of Behavioral Studies Youth (All Behavioral Risk Populations)			
Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
San Francisco City Clinic KABB Survey Results for Teens. (1992)	<p>Cross sectional, self-administered, anonymous KABB survey. Data Collected 1992</p> <p>60% Female</p> <p>Ethnicity: 48% Af-Am 10% Asian/PI 20% Latino 20% White 2% Other</p>	<ul style="list-style-type: none"> • 42% reported 2+ sexual partners in the past 3 months • 25% reported never using condoms in the past 12 months • 46% reported having sex while very high on alcohol or other drugs • 15% reported being so high on alcohol or other drugs that they forgot what they did while having sex • 12% encouraged someone to use alcohol or drugs to make it easier to have sex with them 	<p>Reported drug use:</p> <ul style="list-style-type: none"> • 31% used alcohol use daily or weekly • 32% used marijuana daily or weekly • 12% reported ever using crack
Schwarcz et al. (1992)	<p>68 African American adolescents diagnosed with gonorrhea were compared to 136 control subjects from the same community to analyze crack cocaine and the exchange of sex for money or drugs as risk factors for STDs. No Date Given</p> <p>All were self-identified as heterosexual</p>	<p><u>Females:</u></p> <ul style="list-style-type: none"> • 31% of the gonorrhea patients reported receiving money or drugs for sex, but none of the controls reported this behavior • Mean number of partners among patients was significantly higher than among control subjects <p><u>Males:</u></p> <ul style="list-style-type: none"> • The differences between patients and controls observed for females was not apparent for males 	<p><u>Females:</u></p> <ul style="list-style-type: none"> • Crack cocaine use was reported more often by gonorrhea patients than control subjects • Alcohol and marijuana use in the past month was reported more often by patients than control subjects • Crack use was reported by 89% (8/9) patients who received money or drugs for sex, compared with 11% (2/19) patients and 6% (4/65) of control subjects who denied receiving money or drugs for sex

**Summary of Behavioral Studies
Youth (All Behavioral Risk Populations)**

Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Shafer et al. (1991)	<p>544 9th grade students from 4 SF high schools</p> <p>Study purpose: to evaluate predictors of unsafe sexual and drug use behaviors. No Date Given</p> <p>59% female</p> <p>Ethnicity: 6% Af-Am 43% Asian/PI 13% Latino/a 18% White 20% Mixed/Other</p>	<ul style="list-style-type: none"> • 21% were sexually active • Mean age of sexual debut was 13 yrs of age • 68% had unprotected sex • 18% reported forced sex • 3% reported sex w/ gay or bisexual male partner • 6% reported history of at least one STD infection • 6% reported history of pregnancy (self or partner) • Best predictor of sexual risk behavior was alcohol and drug use. 	<ul style="list-style-type: none"> • 17% used alcohol-daily or frequently • 45% use alcohol occasionally • 22% use marijuana occasionally or frequently • 7% use crack or other cocaine form occasionally or frequently

**Summary of Behavioral Studies
Youth (All Behavioral Risk Populations)**

Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Shafer et al. (1993)	<p>414 sexually active males attending a clinic in an SF youth detention center with no current STD. No DATE Given</p> <p>Ethnicity: 65% Af-Am 11% Latino/a 7% White 16% Multi-Ethnic</p> <p>Asians (n=15) and others (n=29) were excluded from analyses</p> <p>Mean age = 16</p>	<ul style="list-style-type: none"> • 68% had 2+ partners in past 3 mos. • 22% always used condoms • Condom use was lower with main partners than other partners (30% vs. 55%) • Median number of lifetime partners was 15 • 14% reported having engaged in commercial sex • Overall lifetime STD rate of 34%. <p>STD rates by ethnicity:</p> <ul style="list-style-type: none"> • 40% among Af-Ams • 28% among Whites • 26% among Latino/as • 20% among Multi-Ethnic youth 	<p>Alcohol and drug use in the past 3 months:</p> <ul style="list-style-type: none"> • 77% used alcohol • 74% used marijuana • 24% used some other illicit drug • 76% had sex while high on alcohol or drugs

Summary of Behavioral Studies Youth (All Behavioral Risk Populations)			
Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Sherman. (1992)	<p>214 youth aged 10-18, living on the streets, accessing services from at least 1 of 3 SF youth clinics. Data Collected 1990</p> <p>60% Female</p> <p>Ethnicity: 24% Af-Am 7% Asian/PI 22% Latino 43% White 2% Native Amer 2% Other</p> <p>22% Foreign born 84% i.d. as straight, 9% gay, 2% bisexual, 5% unsure.</p>	<ul style="list-style-type: none"> • 90% were sexually active. • Mean age of sexual debut: 13.5 years old. <p>Of the total sample:</p> <ul style="list-style-type: none"> • 85% had vaginal sex. • 44% had oral sex. • 14% had anal sex. • 61% had unprotected sex during last vaginal intercourse. • 30% reported childhood sexual abuse • Sexual abuse was related to trading sex for money or drugs. • 40% had a history of STD • Study STD screening confirmed 21% new cases. 	<p>Substance use in past 2 mos:</p> <ul style="list-style-type: none"> • 40% reported alcohol use • 31% reported marijuana use • 10% reported LSD use • 9% reported cocaine use • 15% injected drugs • 12% had IDU partners

Behavioral Summaries by Ethnicity

The following four sections summarize behavioral data for specific racial/ethnic groups: African Americans, Asians and Pacific Islanders, Latinos and Native Americans. Data come from studies with multi-ethnic samples that report ethnic specific findings and from research on individual ethnic groups. It should be noted that some of the information is outdated and limited due to small sample sizes. It is unfortunate that many studies were not able to sample particular groups in larger proportions, thus limiting the research findings. For example, in some cases summaries rely on the knowledge, attitudes, beliefs, and behavior (KABB) studies that were conducted by community based organizations with limited resources to develop large pools of study participants.

African Americans

There have been a number of behavioral studies conducted in the African American community in San Francisco. Problems in sampling and collecting sensitive and sometimes embarrassing information on sexual behaviors can create limitations in the findings. However, the studies and KABBs still suggest alarming trends in high-risk sexual and drug-using behaviors within this population.

A consistent finding across studies is the high degree of unprotected intercourse among all sexual risk populations. In the AIDS in Multi-Ethnic Neighborhoods (AMEN) study, the African American heterosexual sample reported 88% inconsistent (sometimes or never) condom use among men and 93% inconsistent condom use among women (Catania et al., 1992). Among African American AMEN participants reporting sexual risk factors for HIV, 88% of men and 90% of women only sometimes or never used condoms (Peterson et al., 1992). Caetano and Hines (1995) found that African-American men reported more frequent sex and a greater number of sexual partners than White men. Multiple partners during the past year were reported by 47% African-American males compared to 18% of White males in a national survey. This study also found those who consumed more alcohol were more likely to engage in high risk sexual behavior.

Another study found that there exists between heterosexual African-American men and women a degree of gender politics that has a direct impact on negotiating condom use. This study found that "...traditional sexual roles, which permit men to have sexual freedom but censure women for the same activities, are still operating in the black community. A major problem in relationships between men and women is the lack of effective communication about sexual practices, particularly the use of condoms when partners are not mutually monogamous."

A study of African American gay men found that rates of unprotected anal intercourse in 1990 far surpassed those among gay and bisexual white men studied in 1988—52% reported this behavior among African American gay men, compared to 15%-20% of White gay men (Peterson et al., 1992). In a survey of young (under 25) African-American gay and bisexual men in San Francisco, 55% reported engaging in anal intercourse during the past six months, with 37% of those reporting no condom use (Gage, 1995). Peterson and colleagues (1992) also found high

rates of commercial sex (37%) in their sample of gay and bisexual African-American men, and one-fourth (25%) reported injection drug use. A recent evaluation of targeted intervention for African-American gay and bisexual men found some decreases in prevalence of unprotected anal intercourse, however (Peterson, et al., 1996).

A significant proportion of the literature on crack use shows a high prevalence of this behavior in the African-American community compared to other ethnic groups. Studies on populations that smoke crack generally reflect samples that are largely comprised of African Americans. Among crack smokers sampled in San Francisco and two other cities in 1991, 76% were African American and among those who were IDUs and smoked crack, 69% were African American (Booth et al., 1993). Among a largely African-American (74%) sample of women in the sex industry, 66% smoked crack (Dorfman et al., 1992). Wolfe et al.'s (1992) study of men and women in heroin treatment

Crack users have repeatedly been found to engage in sex with multiple partners and to exchange sex for money or drugs (Edlin et al., 1992; Schumacher, 1996; Wolfe et al., 1992). Behavioral studies with African American participants are shown in Exhibit 3.53.

Exhibit 3.53

Summary of Behavioral Studies African Americans (All Behavioral Risk Populations)			
Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Booth et al. (1993)	<p>HIV risk-related sex behaviors among injection drug users, crack smokers, and injection drug users who smoke crack: multi-site study of drug users recruited in San Francisco (87), Denver (83), and Miami (76). Sampling was conducted in inner city neighborhoods that had a high degree of injection drug use. Data Collected 1991</p> <p>Approx. 2/3 of sample were men</p> <ul style="list-style-type: none"> • 81 IDUs • 57 crack smokers • 108 smoking injectors 	<ul style="list-style-type: none"> • 71% had sex in past 30 days; Mean number of sexual partners was 6; 44% reported multiple partners • Women averaged more sex partners than men (12 v. 3) • Crack smokers and smoking injectors were more likely than injectors to report they had two or more sex partners in past month • 52% of female smokers reported multiple sex partners • Smokers were less likely to have sex with a partner who was known to be an IDU (8%) compared to IDUs (32%) and smoking IDUs (38%) • Crack smokers (56%) and smoking injectors (67%) were more likely to report having sex without condoms than injectors (44%) • Crack smokers (37%) and smoking injectors (41%) were also more likely to exchange drugs for sex or money than non-smoking injectors (15%). 	<ul style="list-style-type: none"> • Crack smokers (58%) and smoking injectors (60%) were more likely to use drugs during sex than injectors (37%) • Injectors were more likely to be Latino; crack smokers were more likely to be African American • African American: 34% of injectors, 76% of smokers and 69% of smoking injectors • Latino: 42% of injectors, 13% of smokers, and 11% of smoking injectors • White: 24% of injectors, 11% of smokers, 11% of smoking injectors

Summary of Behavioral Studies
African Americans (All Behavioral Risk Populations)

Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Caetano and Hines (1995)	<p>Analysis of alcohol use, high-risk sex, and ethnicity from follow-up to 1984 National Alcohol Survey. Sample included: 957 Whites 923 African Americans 929 Latinos.</p> <p>Less than 2% of the sample reported sex with partners of the same gender. Data Collected 1991-92</p>	<ul style="list-style-type: none"> African-American and Latino men reported more frequent sex and greater number of sexual partners. Males with multiple partners in past year: African Amer: 47% Latino: 29% White 18% Females with multiple partners in past year: African Amer: 14% Latina: 3% White: 12% African-American men were most likely to engage in high risk sexual behavior (inconsistent condom use, non-monogamous), especially those who were heavy drinkers (78%), compared to 53% of Latino male heavy drinkers and White male heavy drinkers (41%) % of females reporting high risk sexual behavior: Non-drinker/Drinker Af-Am: 28%/43% Latina: 21%/33% White: 12%/29% 	<ul style="list-style-type: none"> % of women reporting drinking 5 or more drinks on any occasion: African Amer: 21% Latina: 27% White: 25% % of men reporting drinking 5 or more drinks monthly: African Amer: 14% Latino: 22% White: 15%

**Summary of Behavioral Studies
African Americans (All Behavioral Risk Populations)**

Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Catania et al. (1992)	AMEN (AIDS in Multi-Ethnic Neighborhoods) Study Household probability sample of unmarried men and women 20 to 44 years in 16 census tracts characterized by high rates of STDs and admission to drug programs; similar proportions of Af-Am, White, and Latino residents; and proximity to areas of high HIV seroprevalence. Sample of 1229. Data Collected 1988-1989	<ul style="list-style-type: none"> • % of heterosexuals reporting <i>only sometimes or never</i> used condoms: Men: 91% overall White: 91% African American: 88% Latino: 89% Women: 91% overall White 88% African American: 93% Latina: 94% • Those w/multiple sexual partners were least likely to be using condoms. 	
Day et al. (1989)	Survey of 350 Af-Am adult San Franciscans. Random sample from census tracts with high concentration of African Americans. Data Collected 1988-89	<ul style="list-style-type: none"> • Mean # of sexual partners decreased from 3.67 in 1987 to 2.55 in 1988. Those with more than average # of partners were more likely to be young, have risky partners, and engage in unprotected sex. • 10% reported unprotected anal intercourse in the last month; mean of 1.89 times per month. • 52% reported unprotected vaginal intercourse in that last month; mean of 8.75 times per month. • 38% used alcohol during sex; 18.23 times in last year • 23% use marijuana during sex; 21 times in last year. 	<ul style="list-style-type: none"> • 25% reported drug use in past year Marijuana: 44% Cocaine: 29% Crack: 17% IDU: 7% • Of IDUs, mean number of sharing episodes was 7.69 times in last year

**Summary of Behavioral Studies
African Americans (All Behavioral Risk Populations)**

Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
DiClemente et al. (1996)	Survey of 264 African-American adolescents and young adults (aged 12-22) recruited from public housing developments in San Francisco. Follow-up conducted 6 months later with 70% of sample. Data Collected 1992	<ul style="list-style-type: none"> • 56% had ever been sexually active and 78% (n=116) of these reported sexual activity in prior 6 months • 59% reported inconsistent condom use in past 6 months; males: 41% and females: 67% • Median # sexual partners in last 6 months was 2 • Those with 1 sexual partner were more likely to have unprotected sex (64%) than those with 2 or 3 or more partners (51% and 58%). • 84% of those having sex 10 or more 10 times in the last 6 months reported inconsistent condom use, compared to 44% of those who had sex less than 10 times. <p>While many adolescents changed their condom use during the 6 month follow-up, more became inconsistent condom users:</p> <ul style="list-style-type: none"> • 33% of consistent condom users at baseline became inconsistent users by the 6 month follow-up. • 79% of inconsistent condom users at baseline remained inconsistent users by the 6 month follow-up 	

**Summary of Behavioral Studies
African Americans (All Behavioral Risk Populations)**

Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Dorfman et al. (1992)	<p>Women in the Sex Industry: Interviews with 182 women who were sex workers. Over-representation of African-American women reflects outreach & recruitment efforts aimed at African-American neighborhoods known for high drug, crack use & prostitution. Data Collected 1989-90</p> <p>Ethnicity: 74% Af-Am 6% Latina 4% Native Amer 17% White</p>	<ul style="list-style-type: none"> • 94% always or sometimes used condoms w/ clients but only 25% did so with their partners (this pattern remained for HIV & syphilis infected women) • 72% said they feel they are at risk for getting AIDS • Most women felt that changing behavior with personal partners is more difficult than changing behavior w/commercial partners • Women displayed the intention to reduce AIDS risk most often with clients rather than steady partners 	<ul style="list-style-type: none"> • 66% used crack • Syphilis was most prevalent among women who used crack exclusively (23% infected) • 39% of cohort had injected drugs • 11 of the 14 women who were HIV-positive had injected drugs
Edlin et al. (1992)	<p>High-risk sex behavior among young street-recruited crack cocaine smokers in three American cities. Cross sectional interview survey of 1,356 youth ages 19-20 in urban neighborhoods in SF(BVHP), New York and Miami; Data Collected 1991 Afr-Amer. 78% Latino 18%</p>	<ul style="list-style-type: none"> • The crack smokers in this sample engaged in higher risk sex behaviors than the nonsmokers. This differences was particularly evident among the participants who had never injected drugs • Crack smokers where more likely than nonsmokers to report exchanging sex for money or drugs, having had more sex partners and ever having a STD • Condom use was generally infrequent, regardless of sex or drug use history • Less than one-third (28%) used condoms consistently and just over one-third (36%) of the sample used a condom when they last had sex 	

Summary of Behavioral Studies African Americans (All Behavioral Risk Populations)			
Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Friedman et al. (1993)	Data from approx. 12,000 street-recruited drug injectors in 19 cities were analyzed to determine racial differences in sexual risk for HIV transmission. No Date Given	<ul style="list-style-type: none"> • All racial/gender groups averaged 15 or more episodes of unprotected vaginal sex per month; 10% of most groups reported having anal sex in past 6 months. • Latino and African-American males reported more frequent unprotected vaginal sex than White males. 	
Fullilove et al. (1992)	AMEN Study: Analysis of various risk behaviors among heterosexual men and women. Data Collected 19988-1989	<ul style="list-style-type: none"> • % reporting one or more risk behaviors in the past year: Women: Latina: 5% Af-Am: 10% White: 21% Men: Latino: 9% Af- Am: 11% White: 14% 	
Gage (1995)	Risk behavior survey of young (under 25) African-American gay and bisexual men contacted through outreach at SF locations. Data Collected 1992 - 1995.	<ul style="list-style-type: none"> • 69% of those surveyed during 1992-1993 reported any anal intercourse during last 6 months; 29% of those were unprotected. • 55% of those surveyed in 1993-1995 reported anal intercourse during last 6 months; 37% of those were unprotected • Of those having anal intercourse during 1993-95, men 19 and younger were more likely to have UAI (30%) than 20-25 year olds (14.4%). • 24% engaged in vaginal intercourse, 21% of those were had unprotected vaginal intercourse. 	

**Summary of Behavioral Studies
African Americans (All Behavioral Risk Populations)**

Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Peterson et al. (1996)	Evaluation of HIV risk reduction for African-American homosexual and bisexual men in San Francisco. Self reported changes among 318 men receiving single or triple group sessions compared to a control group. Data Collected 1990-1991	<ul style="list-style-type: none"> • Baseline rates of unprotected anal intercourse (UAI) ranged from 26% to 46% of study participants. • Triple session participants reduced UAI 46% to 20% after 12 months and 45% to 20% after 18 months. • Control group's rates of UAI remained constant: 26-23% after 12 months and 24-18% at 18 months. • Single session group participants decreased their rates of UAI only slightly. 	
Peterson et al. (1992)	Data from the AIDS in Multi-Ethnic Neighborhoods (AMEN Study): random sampling of 16 San Francisco census tracts in the Mission, Western Addition and Bayview/Hunter's Point. Analysis of 848 unmarried, sexually active African-American and White heterosexual males and females. Data Collected 1988-1989	<ul style="list-style-type: none"> • % of women with IDU partner in last yr: African American: 5% White: 17% • % with 2 or more partners in last year / no condom used: Men: African Amer: 64% / 12% White: 56% / 13% Women: African Amer: 33% / 4% White: 45% / 6% • % with 5+ partners in past yr: Men: African Amer: 40% White: 43% Women: African Amer: 24% White: 34% • % of those with sexual risk factor who never use condoms: Men: African Amer: 62% White: 60% Women: African Amer: 75% White: 53% 	IDU use: Ever/in last yr. Men: Afr. Amer: 12% / 4% White: 17% / 6% Women: Afr. Amer: 5% / 2% White: 15% / 6%

Summary of Behavioral Studies African Americans (All Behavioral Risk Populations)			
Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Peterson et al. (1992)	African American Men's Health Study 250 self-identified gay and bisexual men recruited in San Francisco, Berkeley, and Oakland. Data Collected 1989 - 1990	<ul style="list-style-type: none"> • In last six months: 22% unprotected anal sex w/ primary partners. 35% unprotected anal sex w/ secondary partners • 19% reported unprotected anal sex w/ejaculation w/ primary partners; 30% unprotected anal sex w/ejaculation w/ secondary partners • Higher prevalence (52%) of unprotected anal intercourse in the past 6 months in 1990 than did gay and bisexual White men in 1988 (15-20%) • 37% engaged in prostitution 	<ul style="list-style-type: none"> • 25% used injection drugs
Schumacher (1996)	Risk factors among 23 crack using African-American women in residential drug treatment. No Date Given	<ul style="list-style-type: none"> • 90% had 3 or more sexual partners in the past year; 40% had 5 or more partners. Mean number of partners in the past 3 months was 7.3, with a range of 0-56 • 70% had unprotected sex with an unfamiliar partner • 10% had unprotected sex with an IDU • 26% reported using a condom during vaginal sex • 87% traded sex for crack • 57% reported inconsistent condom use during sex while using cocaine 	

**Summary of Behavioral Studies
African Americans (All Behavioral Risk Populations)**

Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Wolfe et al. (1992)	<p>Interviews examining crack use and HIV risk behavior of 1,281 heterosexual IDUs recruited from heroin treatment programs in San Francisco. Sample was 59% male. Data Collected 1988-1990.</p> <p>Ethnicity: 27% Af-Am 15% Latino 59% White</p>	<ul style="list-style-type: none"> • Female crack users were more likely than other women to report exchanging sex for money or drugs (30% v. 19%) • Crack users were more likely to report 6 or more sex partners in past year (15% v. 9%) 	<ul style="list-style-type: none"> • Women were more likely to report crack use than men and they used it more heavily • Crack use was more prevalent among African-Americans (47% v. 14% of Whites and 15% of Latinos) • 58% of African-American women reported crack use; 25% reported heavy use • IV cocaine use was more frequent among crack users (35% v. 20%) • Crack users were significantly more likely to report injecting in shooting galleries in past year

Asian/Pacific Islanders

Asian/Pacific Islanders are an ethnic group that appears to be at lower risk for HIV infection than African Americans, Latinos, and Whites, according to current HIV epidemiological data. However, there is cause to be concerned about the future incidence of HIV infection in this community.

Although several published behavioral studies and KABBs have been conducted within the community, specifically among Southeast Asians, Filipinos, Chinese, and Japanese, there has never been a population-based behavioral study conducted among Asian/Pacific Islanders, either as a whole or as individual cultural groups, in San Francisco. In addition, the KABBs summarized here do not represent current information as they are older than most of the behavioral studies on other populations. The KABBs also have rather small sample sizes, and in some cases the representativeness of the sample is questionable. For these reasons, findings may misrepresent actual behaviors in populations as a whole.

Due to the rich cultural diversity of this community, it is difficult to generalize the limited behavioral findings to the population as a whole. However, there are several behavioral factors that seem to cross cultural boundaries that may be helpful in defining the risk of this population and designing effective prevention strategies.

Across all groups studied, rates of unprotected intercourse are extremely high. For example, the majority of a Southeast Asian sample were found to engage in sex without a condom (Murase et al., 1991). Nearly two-thirds (65%) of the Chinese sample reported that they never or sometimes used condoms (Ja et al., 1990a), and 63% of the Japanese sample reported sexual intercourse without a condom in the last year (Ja et al., 1990b). Between 27% and 72% of sexually active, unmarried Vietnamese adults surveyed in Southern California report never or sometimes using condoms. Women were more likely to report inconsistent condom use (Gellert et al., 1995). Particularly alarming is the finding that 93% of a sample of Asian-American young adults age 18 to 25 reported practicing sexual intercourse without condoms (Cochran et al., 1991).

The impact of culture on various risk behaviors cannot be underestimated. For example, among a Southeast Asian sample, Laotians had the highest rate of unsafe drug use (11%). (The representativeness of the sample in this KABB is questionable, however.) The study authors stated this finding may be attributable to a greater tolerance of substance use in parts of their native country (Murase et al., 1991). Another study found significant differences in sexual activity and communication skills among Chinese and Filipino students, suggesting that prevention messages should be delivered separately to each group. One-third (32%) of Filipino students and 13% of Chinese students were sexually active, and Chinese students were less able to communicate about HIV disease and prevention (Horan and DiClemente, 1993).

Behavioral risk among self-identified gay and bisexual Asian and Pacific Islander men has been documented in two recent studies in San Francisco. Researchers reported similar findings regarding rates of unprotected anal intercourse among this population. Over one-fourth

(27%-28%) reported this behavior in the previous three months (Choi, 1995; Choi et al., 1996). Choi (1995) pointed out that this was a higher rate than found in the 1988 San Francisco Men's Health Study. In addition, 59% of the sample reported multiple partners during the previous three months (Choi, 1995). Exhibit 3.54 contains information derived from Asian/Pacific Islander populations.

Exhibit 3.54

Summary of Behavioral Studies Asian and Pacific Islanders (All Behavioral Risk Populations)			
Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Choi. (1995)	Study of 241 self-identified gay Asian/PI men in San Francisco. Data Collected 1992-93 Chinese 39% Filipino 28% Japanese 11% Others 22%	<ul style="list-style-type: none"> • 59% had multiple sexual partners in previous 3 months • 27% engaged in unprotected sex in previous 3 months (which is a higher rate than the 1988 SF Men's Health Study finding, 18% during a 12-month period) • Men under the influence of alcohol or drugs were significantly more likely to engage in unprotected anal intercourse 	
Choi et al. (1996)	Evaluation of brief group counseling intervention with 329 self-identified homosexual Asian and Pacific Islander men recruited in San Francisco. Data Collected 1992-1994.	<ul style="list-style-type: none"> • Mean number of partners during past three months at baseline was 3.9 • 28% engaged in unprotected anal intercourse • Those in drug treatment had 46% fewer partners • Chinese and Filipino men had less unprotected anal sex 	
Cochran et al. (1991)	Survey of 153 Asian/PI age 18-25 self-identified heterosexuals attending one of several Southern California universities. Small sample did not allow for cultural subgroupings. Data Collected 1987-1988	<ul style="list-style-type: none"> • 44% of males and 50% of females were sexually active • 93% overall reported engaging in sexual intercourse without condoms at least once in the past • 15% had tried anal intercourse at least once • 17% reported that they had been possibly exposed to a STD at some point • 91% of males reported inconsistent condom use • 86% of females reported inconsistent condom use 	

Summary of Behavioral Studies Asian and Pacific Islanders (All Behavioral Risk Populations)			
Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Fairbank et al. (1991)	A survey of AIDS knowledge, attitudes and behaviors in San Francisco's American-Indian, Filipino and Latino gay and bisexual male communities. Respondents located at clubs, gay bars, health agencies, etc. Data Collected 1990 <ul style="list-style-type: none"> • 60 Amer. Indians • 106 Filipinos • 100 Latinos • Self-identified: Gay: 90% Bisexual: 2% Straight: 2% 	Results of Filipino respondents: <ul style="list-style-type: none"> • 34% reported unprotected anal intercourse with a male partner. • 62% reported not always using condoms. • 68% reported difficulty in talking about condoms with their sexual partners. 	<ul style="list-style-type: none"> • 42% reported sex under the influence of alcohol or another drug; of these, 36% were less likely to use a condom when "under the influence." • 33% reported marijuana use. • 9% admitted to injecting some drug in the past year, one injecting an hallucinogen, two cocaine, and seven injecting vitamins.
Gellert et al. (1995)	Survey of 532 Vietnamese adults in Southern California. Data Collected 1992	<ul style="list-style-type: none"> • 69% reported any sexual activity <p>Among sexually experienced:</p> <ul style="list-style-type: none"> • 8% reported 2 or more sexual partners in last 12 months • 17%-40% of unmarried respondents reported never using condoms; 10%-32% reported sometimes using condoms 	
Gorrez et al. (no date)	Household survey of 400 Filipino residents of San Francisco. Data Collected 1989-1990.	<ul style="list-style-type: none"> • 6% reported having unprotected sex with homosexuals, bisexuals, HIV infected persons, female prostitutes, transfusion recipients (prior to 1985), multiple sex partners, and persons with venereal diseases and unknown sex histories 	<ul style="list-style-type: none"> • None of the 400 respondents reported injection drug use nor having an IDU sex partner

Summary of Behavioral Studies Asian and Pacific Islanders (All Behavioral Risk Populations)			
Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Horan PF et al. (1993)	<p>Survey of 1,272 Chinese, Filipino and White high school students. Data Collected 1989</p> <p>Chinese 47% Filipinos 16% Whites 9%</p>	<ul style="list-style-type: none"> • % of students who were sexually active: Chinese 13% Filipinos 32% White 37% • Among sexually active students, no racial ethnic differences were found for the total sexual behavior risk index • Chinese students were less able to communicate with others about HIV disease and prevention 	<ul style="list-style-type: none"> • 2 % reported using injection drugs
Ja et al. (1990)	<p>192 Chinese residents of San Francisco were interviewed. Data Collected 1989-1990.</p> <p>Conducted by Asian American Recovery Services, Inc.</p>	<ul style="list-style-type: none"> • 5% reported having sexual relations with prostitutes • 65% indicated they never or sometimes used condoms. Only 11% reported "always" using condoms • 41% reported ever having vaginal sex without a condom 	<ul style="list-style-type: none"> • Reported drug use was minimal. Only one person reported use of injection drugs
Ja et al. (1990)	<p>Survey conducted among 200 Japanese adults in San Francisco. Data Collected 1989.</p> <p>Asian American Recovery Services, Inc.</p>	<ul style="list-style-type: none"> • Only 10% reported always using condoms during sexual intercourse • During the past year, 63% of the respondents reported sexual intercourse without a condom • 7% reported anal intercourse without a condom • 13% reported having a female prostitute as a sexual partner and 2% reported male prostitutes as sexual partners 	<ul style="list-style-type: none"> • Alcohol was used at least 3-4 times weekly by 27% of the total population • Unsafe drug use with a needle was reported by only one respondent

Summary of Behavioral Studies Asian and Pacific Islanders (All Behavioral Risk Populations)			
Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Murase et al. (1991)	<p>Randomly selected sample of Southeast Asian adults age 18-60 in Tenderloin area of San Francisco. Data Collected 1990.</p> <p>Cambodian: 87 Laotian: 91 Vietnamese: 205</p> <p>Conducted by Center for Southeast Asian Refugee Resettlement.</p>	<ul style="list-style-type: none"> • Rate of high risk sexual behavior: Cambodian: 6% Vietnamese: 9% Laotians: 21% • One half of respondents in all 3 samples stated they had not changed their sexual behavior • Multiple sexual partners: Cambodians: 4% Vietnamese: 12% Laotians: 24% • Laotians had the highest incidence of high-risk partners, followed by Vietnamese and Cambodians • The majority of all three samples were found to engage in sex without use of a condom. The high rate of non-condom use may reflect the high proportion of married respondents and single partner relationships in the samples 	<ul style="list-style-type: none"> • Laotian sample had the highest unsafe drug use rate at 11%. May be attributable to a greater tolerance of substance use in parts of their native country, associated with the production of opium in the region bordering Burma • Alcohol consumption was low

Latinos

Factors that influence behavior and attitudes among Latino/Hispanic populations include country of origin or descent, length of time in this country, attitudes toward and degree of acculturation, legal status, and migration and/or transience patterns. Many groups fit under the general title of Latino/Hispanic. In descending order of most represented in San Francisco are the following groups (Hernandez, 1996).

Mexicanos

Central Americanos

- El Salvador
- Guatemala
- Nicaragua
- Costa Rica
- Honduras

Caribbean

- Puerto Rico
- Cuba
- Dominican Republic

South American

- Venezuela
- Chile
- Brazil

Several factors have been determined to be predictors of high-risk sexual behaviors among heterosexual Latino adults. Studies have found that high self-efficacy in using condoms is strongly associated with prior use of condoms and low self-efficacy is associated with discomfort with sexuality (Gomez et al., 1996; Marin et al., 1996; Marin et al., 1993b). For men and women, predictors of having multiple partners include: being unmarried, level of acculturation (less acculturated men and more acculturated women were more likely to report multiple partners of the opposite gender), and the interaction of ethnicity, language, and gender (Marin et al., 1993b). Sabogal and colleagues (1995) also found Latino men much more likely to have multiple partners than Latina women.

An important factor affecting sexual risk taking has to do with issues of culture. Among Latinos, acculturation is a significant predictor of many health-related behaviors. For example, the cultural value of machismo promotes sexual intercourse with prostitutes to demonstrate virility and as a way of achieving sexual satisfaction (Marin, 1989). Engaging in sex outside marriage has also been found to be more common among Latinos. Nearly one-fifth (18%) of married Latino men in a national sample reported multiple partners compared to 9% of married White men (Marin et al., 1993a). Additionally, Latino men who have sex with men may not

consider themselves homosexual, making it difficult to target this group with messages that focus on identity rather than behavior.

Several studies evaluated ethnic differences in sexual attitudes and behaviors. While condom use is generally found to be low—5% to 11% reported always using condoms (Marin et al., 1993c; Catania et al., 1992)—Latina women reported lower rates of condom use than non-Latina White women. Approximately three-fourths (71%-79%) of Latina women sampled in San Francisco reported no condom use compared to 53% of non-Latina White women (Marin et al., 1993c). Latino men have also reported lower frequency of condom use compared to White men, with those less acculturated reporting the lowest rates of condom use (Sabogal et al., 1995). Marin and her colleagues (1993c) also found that Latinos, generally, had poorer attitudes toward condoms and were less likely to believe they could avoid AIDS than non-Latino whites.

An additional important finding that is culturally specific to Latinos is that 13% of San Francisco Latino residents report receiving injections of medications or vitamins outside of medical settings and perceive less of a risk of transmission with these injections than with injecting illegal drugs.

A factor often overlooked in consideration of HIV prevention for these populations in the City is the issue of migrant workers. Most people associate the term migrant worker with agricultural field labor and assert that San Francisco's migrant labor population is too small to be of concern. However, this is a restrictive view of the term. Migrant work occurs not only in the fields, but in restaurants, factories, and construction sites. San Francisco is home to a great number of Latina/o day laborer and temporary workers. Further, San Francisco is the winter home for many who work in the agricultural areas during the rest of the year. Not only do many migrant workers live in the City for at least part of the year, many come here when work is short to recreate, visit family, or seek work. The risk behaviors of this population are poorly understood and more research is needed. Research conducted on Latino populations is shown in Exhibit 3.55.

Exhibit 3.55

Summary of Behavioral Studies Latinos (All Behavioral Risk Populations)			
Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Caetano et al. (1995)	<p>Analysis of alcohol use, high-risk sex, and ethnicity from follow-up to 1984 National Alcohol Survey.</p> <p>Sample included: 957 Whites 923 African Americans 929 Latinos</p> <p>Less than 2% of the sample reported sex with partners of the same gender. Data Collected 1991-92</p>	<ul style="list-style-type: none"> African-American and Latino men reported more frequent sex and greater number of sexual partners % of males with multiple partners in past year: African Amer: 47% Latino: 29% White 18% % of females with multiple partners in past year: African Amer: 14% Latina: 3% White: 12% African-American men were most likely to engage in high risk sexual behavior (inconsistent condom use, non-monogamous), especially those who were heavy drinkers (78%), compared to 53% of Latino male heavy drinkers and White male heavy drinkers (41%) % of females reporting high risk sexual behavior: Non-drinker / Drinker Afr-Am: 28% / 43% Latina: 21% / 33% White: 12% / 29% 	<p>% of women reporting drinking 5 or more drinks on any occasion: African Amer: 21% Latina: 27% White: 25%</p> <p>% of men reporting drinking 5 or more drinks monthly: African Amer: 14% Latino: 22% White: 15%</p>

**Summary of Behavioral Studies
Latinos (All Behavioral Risk Populations)**

Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Catania et al. (1992)	AMEN (AIDS in Multi-Ethnic Neighborhoods) Study Household probability sample of unmarried men and women 20 to 44 years in 16 census tracts characterized by high rates of STDs and admission to drug programs; similar proportions of Black, White, and Latino residents; and proximity to areas of high HIV seroprevalence. Sample of 1229. Data Collected 1988-1989	<ul style="list-style-type: none"> • % of heterosexuals reporting <i>only sometimes or never</i> used condoms: <ul style="list-style-type: none"> Men: 91% overall African American: 88% Latino: 89% White: 91% Women: 91% overall <ul style="list-style-type: none"> African American: 93% Latina: 94% White 88% • Those w/multiple sexual partners were least likely to be using condoms 	
Diaz et al. (1996)	Study of 159 Latino self-identified gay men in Tucson, AZ. Questionnaire in English only, so sample most likely overrepresents highly acculturated men. Data Collected 1992	<ul style="list-style-type: none"> • 22% engaged in unprotected anal intercourse (UAI) with non-monogamous partners during the past 30 days • 51% reported at least one instance of UAI in last year • Of those having any anal sex in last 30 days, 67% had UAI with primary partners and 44% with other partners • Sex while high on drugs/alcohol and sex in public environments were important correlates of HIV risk 	

Summary of Behavioral Studies
Latinos (All Behavioral Risk Populations)

Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Fairbank et al. (1989)	329 Latino residents of San Francisco were interviewed. These results were then compared, where applicable, to a 1987 study, "A Baseline Survey of AIDS Risk Behaviors and Attitudes in San Francisco's Latino Communities." Data Collected 1988	<ul style="list-style-type: none"> • 14% of the respondents in 1988 had engaged in either "unsafe" sexual behavior, drug behavior, or both • In the past month, 5% of respondents in 1988 had engaged in "unsafe" sexual behavior compared to 12% in 1987 • Nearly twice as many people had "vaginal sexual relations with a condom" in 1988 (25%) as in 1987 (14%) • Fewer people engaged in "anal sexual relations when you do not use a condom" in 1988 (2%) than in 1987 (6%) • 31% of 1988 respondents said they had engaged in "vaginal sexual relations with a condom" during the past year • 6% in 1987 and 5% in 1988 had two or more sexual partners in the previous month • Men were more likely than women to have multiple sexual partners in both the previous month and the previous year 	<ul style="list-style-type: none"> • 2% of respondents in both 1987 and 1988 had ever engaged in "unsafe" injection drug use • Approx. 1 in 5 (19%) had been "high" or "under the influence" of alcohol, marijuana, cocaine, or some other drug during sexual activity w/in the past year • 23% of these people said they were less likely to use a condom those times that they were "under the influence" • 4% of all respondents were "under the influence" of some drug during sexual activity and less likely to use a condom at such times in the previous year

Summary of Behavioral Studies
Latinos (All Behavioral Risk Populations)

Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Fairbank et al. (1991)	<p>A survey of AIDS knowledge, attitudes and behaviors in San Francisco's American-Indian, Filipino, and Latino gay and bisexual male communities. Respondents located at clubs, gay bars, health agencies, etc. Data Collected 1990</p> <ul style="list-style-type: none"> • 60 Amer. Indians • 106 Filipinos • 100 Latinos <p>• Self-identified: Gay: 90% Bisexual: 2% Straight: 2%</p>	<p>Results for Latino respondents:</p> <ul style="list-style-type: none"> • 47% reported unprotected anal intercourse with a male partner, at least once, during the preceding 12 months. • 46% said that condoms are not necessary when they have just one partner. • 50% reported definite "at-risk" sexual behavior. 	<ul style="list-style-type: none"> • 60% reporting being under the influence of alcohol, marijuana, cocaine or some other drug during sexual activity; of these, 30% were less likely to use a condom. • 10% admitted to injecting some drug in the past year. • 3 respondents (30% of IDUs) had shared a needle in the previous year.
Friedman et al. (1993)	<p>Data from approx. 12,000 street-recruited drug injectors in 19 cities were analyzed to determine racial differences in sexual risk for HIV transmission. No Date Given</p>	<ul style="list-style-type: none"> • All racial/gender groups averaged 15 or more episodes of unprotected vaginal sex per month; 10% of most groups reported having anal sex in past 6 months • Latino and African-American males reported more frequent unprotected vaginal sex than White males • Mexican-origin males and females were least likely to report using condoms in multi-cultural black/white/Mexican-origin cities 	
Fullilove et al. (1992)	<p>AMEN Study: Analysis of various risk behaviors among heterosexual men and women.</p>	<p>• % reporting one or more risk behaviors in the past year:</p> <p>Women:</p> <ul style="list-style-type: none"> Latina 5% African Amer. 10% White 21% <p>Men:</p> <ul style="list-style-type: none"> Latino 9% African Amer. 11% White 14% 	

**Summary of Behavioral Studies
Latinos (All Behavioral Risk Populations)**

Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Gomez et al. (1996)	Telephone survey of 1600 unmarried Latino adults in 10 states. Analysis of 536 female respondents to determine relationships between sexual disempowerment and condom use. No Date Given	<ul style="list-style-type: none"> • Sexual disempowerment was a “strong mediator” in terms of its impact on Latina women’s sexual comfort and self-efficacy in condom negotiation and thus condom use 	
Marin. (1989)	Report describes the Latino population’s areas of greatest need in AIDS prevention and identifies Latino-cultural characteristics that prevention strategies must reflect. No Date Given	<ul style="list-style-type: none"> • There is a pattern of very low use of condoms among Latinos. • The cultural value of machismo promotes sexual intercourse w/prostitutes to demonstrate virility and as a way of achieving sexual satisfaction 	<ul style="list-style-type: none"> • Latino IDUs are difficult to reach by conventional methods because treatment and prevention services too frequently are neither culturally appropriate nor available

**Summary of Behavioral Studies
Latinos (All Behavioral Risk Populations)**

Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Marin et al. (1993)	Multiple heterosexual partners and condom use among Latinos and non-Latino Whites examined in telephone interviews with adults in nine States. Interviews conducted w/ 2221 adults aged 18 to 49 years; 1592 Latinos and 629 Whites. Data Collected 1988-1989	<p>Multiple Sexual Partners:</p> <ul style="list-style-type: none"> • 18% of married Latino men and 9% of married white men reported 2 or more partners. • 60% of unmarried Latino men reported 2 or more partners • Multiple partners among Latino men was more prevalent in Northeastern states , • 5% Latina women reported 2 or more male partners • 23% Latina women reported no partners <p>Condom Use Among those with multiple partners:</p> <ul style="list-style-type: none"> • 51% men and 54% women reported inconsistent condom use with secondary partners • 80% of men and 87% of women reported inconsistent condom use with primary partner 	

**Summary of Behavioral Studies
Latinos (All Behavioral Risk Populations)**

Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Marin et al. (1993)	Telephone survey in nine states; analysis of condom use among Latino men with secondary female sexual partners. Data Collected 1991	<ul style="list-style-type: none"> • 361 (37%) of 968 Latino men ages 18-49 reported having more than one female partner in 12 months prior to sampling • 51% reported inconsistent condom use with secondary partners in the last 12 months • Carrying condoms: in this sample, carrying condoms was an indicator of preparedness for safe sex w/ a secondary partner and of greater experience w/condoms • Self-efficacy in using condoms strongly associated with prior use of condoms 	
Marin et al. (1996)	Telephone survey of 1600 unmarried Latino adults in 10 states. Analysis of 594 male respondents to determine relationships between traditional gender role beliefs and sexual coercion and condom use. Data Collected 1993	<ul style="list-style-type: none"> • "Traditional gender role beliefs impede condom use among Latino men by encouraging sexual coercion, lowering sexual comfort and interfering with self-efficacy to use condoms" 	

**Summary of Behavioral Studies
Latinos (All Behavioral Risk Populations)**

Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Marin et al. (1993)	<p>Interview of 938 unmarried heterosexual adults who self-identified as either Latino (N = 398) or white (N = 540).</p> <p>Data analyzed to determine acculturation (Spanish or English speaking) and gender differences in sexual attitudes and behaviors. Data Collected 1991</p>	<ul style="list-style-type: none"> • Approximately 80% of Latino men and 65% of Latina women were sexually active in previous 12 months • Over one-third (35%) of the Spanish-speaking men and almost half (48%) of the English-speaking Latino men reported multiple partners • 21% of English-speaking Latina women and 5% of Spanish-speaking women reported multiple partners • Inconsistent condom use: Latina Women: 94% Latino Men: 89% • Condom use was low in all groups, but Spanish-speaking Latina women reported lower condom use than white women, and their male counterparts reported high rates of multiple partners • Men, particularly Spanish speaking, had the most negative attitudes about condoms 	
Sabogal et al. (1995)	<p>Gender, ethnic, and acculturation differences in sexual behaviors among Latino and non-Latino White adults in San Francisco and Alameda Counties (randomly selected from census tracts and HMO members. Data Collected 1990-91.</p>	<ul style="list-style-type: none"> • Latino men reported lower rates of condoms use that non-Latino White men. Less acculturated Latino men had a lower frequency of condom use that did more highly acculturated Latino men • Among Latinos, men were much more likely than women to have two or more sexual partners during the last 12 months 	

Native Americans

There is currently very little research completed on the behaviors of Native Americans as a group. To date, there have been no behavioral studies or KABB studies conducted in any San Francisco Native American communities other than the KABB that sampled gay/bisexual American Indian men. Even the population estimates provided by census data are probably inaccurate, since many Native Americans in California have Spanish surnames and are classified as Latino, and many do not self identify as Native American to outsiders.

Because of the seeming invisibility of the Native American community in the eyes of mainstream culture, two significant factors make behavior change among high-risk Native Americans an extremely difficult task. They are 1) insufficient funding, and 2) denial within Native American communities that HIV/AIDS poses a real threat. However, in spite of these factors, HIV has become a significant health threat within this community, particularly among men who have sex with men. The table at the end of Section IV (recent AIDS cases) of this chapter shows that rates per 100,000 Native Americans are quite high—often higher than rates among any other ethnic group.

According to the Centers for Disease Control and Prevention, at least 79% of current AIDS cases among Native Americans are among men who have had sex with other men. The behavioral risk of these men is extremely high. A San Francisco KABB of American Indian, Filipino, and Latino gay and bisexual men revealed that 20% of American Indians surveyed engaged in unprotected anal intercourse with other males, 73% indicated only occasional condom use, 68% reported difficulty talking to partners about condoms, 15% admitted daily alcohol use, and 68% were unemployed (Fairbank et al., 1991).

Reaching these men with HIV prevention messages is also extremely difficult due to the closeted nature of same-sex activity in this community. Compared to other populations, Native-American men are far more secretive about their homosexual feelings and behaviors. Over 95% believe “the part of me most people are *least likely* to know is my sexual orientation” (Fairbank et al., 1991). The great majority have not revealed their sexual orientation to parents, siblings, or other relatives. They go to considerable lengths to keep their sexual orientation concealed: hiding things when visited, watching what they say when anyone is within earshot, and so forth.

A series of focus groups on the needs of Native American women were conducted by the Native American AIDS Project. The focus group findings reveal that Native American women are extremely reluctant to seek services within their own community due to a fear of stigmatization and a deep-rooted mistrust of the Indian Health Service around issues of confidentiality. The main problem stated by the group participants was their fear of testing for HIV or other STDs in their communities. Many of the participants shared experiences where confidential health information had been disseminated within their communities without their permission. Native American Behavioral Studies are summarized in Exhibit 3.56.

Exhibit 3.56

Summary of Behavioral Studies Native Americans (All Behavioral Risk Populations)			
Authors	Description of Study	Sexual Behaviors	Drug Use Behaviors
Fairbank et al. (1991)	<p>Analysis of 60 interviews conducted among American Indian respondents at clubs, gay bars, health agencies, etc. (part of a larger study including Filipino and Latino gay and bisexual males).</p> <p>Data Collected 1990. 40% of the Native American sample was raised on a reservation or mostly Indian community.</p> <p>Gay identified: 90%</p>	<ul style="list-style-type: none"> • 20% reported unprotected anal intercourse with a male partner • 73% reported using condoms only sometimes • 68% report having difficulty in talking about condoms with their sexual partners 	<ul style="list-style-type: none"> • 13% reported sex under the influence of alcohol or another drug • 27% reported marijuana use • 2% reported injecting cocaine, speed, or some other amphetamine

VIII. HIV PREVENTION STUDIES IN PROGRESS

Previous sections of this chapter describe the findings of published studies about HIV prevalence and risk behaviors. Many studies are currently in progress or recently completed for which findings have not been published. The tables below outline key information about these studies. These tables describe studies conducted principally by the Department of Public Health, notably the AIDS Office, and the University of California at San Francisco Center for AIDS Prevention Studies (UCSF CAPS). These two institutions are involved with the majority of studies related to HIV prevention in San Francisco, and thus the tables below outline most, but not all, of the studies currently in progress. Prevention studies conducted by the San Francisco Department of Public Health, AIDS Office are listed in Exhibit 3.57. Exhibits 3.58 and 3.59 describe STD Prevention and Control Programs and CAPS affiliated studies.

Exhibit 3.57
AIDS OFFICE STUDIES

STUDY	AGENCY	POPULATION	DESCRIPTION	STATUS
AIDS Evaluation of Street Outreach Project (AESOP)	AIDS Office / Haight Ashbury Free Clinics Inc. CDC funding	Homeless and runaway youth (13-24 yrs) recruited from street based locations in the Haight Ashbury (All HPPC behavioral risk populations)	Cross-sectional study (6 waves of data collection) designed to describe a population of high risk youth and evaluate street outreach efforts.	Baseline descriptive analysis completed and published. A descriptive drug use paper and an evaluation paper will be submitted for publication early 1997.
Family of Surveys (Prevalence surveillance for high risk youth)	AIDS Office / Youth Guidance Center, Cole Street Clinic, Larkin Street Clinic	Homeless or incarcerated youth. (All HPPC behavioral risk populations)	Sentinel Surveillance of HIV infection in sites serving high risk youth. (Larkin Street, Cole Street, and YGC)	Results from several years of surveillance at Larkin & Cole Street clinics are available in the monthly surveillance report. Further analysis will be available early 1997.
Family of Surveys (Prevalence surveillance for women)	AIDS Office / SF General Family Planning Clinic, Health Center #3	All female HPPC behavioral risk populations	Sentinel Surveillance of HIV infection in sites serving pregnant women	Surveillance results are ongoing & published in surveillance report.
Family of Surveys (Prevalence surveillance for drug users)	AIDS Office / Bayview/Hunter's Point, Westside Methadone Clinic, Haight Ashbury Free Clinic	MSM-IDU MSM/F-IDU MSF-IDU FSF-IDU FSF/M-IDU FSM-IDU	Sentinel Surveillance of HIV infection in clinics serving injection drug users	Surveillance results are ongoing & published in monthly surveillance report.
Family of Surveys (Prevalence surveillance for STD & TB patients)	AIDS Office / SF City Clinic, SF General TB Program	(All HPPC behavioral risk pops)	Sentinel Surveillance of HIV infection in STD clinics	Surveillance results are ongoing & published surveillance report.

AIDS OFFICE STUDIES

STUDY	AGENCY	POPULATION	DESCRIPTION	STATUS
Young Men's Survey (YMS)	AIDS Office (CDC funding)	MSM MSM-IDU MSM/F MSM/F-IDU	HIV & STD prevalence and risk behavior study of young men (18-22 years)	YMS II published. YMS III initial results available Fall 1996, final results available in 1997.
San Francisco Lesbian & Bisexual Women's Survey	AIDS Office (CDC funding)	FSF FSF-IDU FSF/M FSF/M-IDU	Survey of HIV & STD prevalence and risk behaviors.	Analysis complete and recently published.
San Francisco Women's Health Survey	AIDS Office	FSF FSF-IDU FSF/M FSF/M-IDU	Survey of HIV risk behaviors.	Summary results available 1996. Final analysis will be published 1997.
WEDGE program Evaluation	AIDS Office, WEDGE Program, San Francisco School District	In School youth (All HPPC behavioral risk populations)	Descriptive survey of students' knowledge, attitudes, behavioral intent.	Final results will be available 1997.
Counseling & Testing Data	AIDS Office, all CTRPN sites in San Francisco	All HPPC behavioral risk populations. Data on transgendered persons is now being collected.	Demographic, risk behavior, and co-factor information is collected for all anonymous and confidential testees.	Data management is being conducted. Valid results will not be available until 1997.
Prevention Indicators Development & Testing	AIDS Office, other DPH & CBO programs (CDC Funding)	All HPPC behavioral risk populations	Development and pilot test of a core set of prevention indicators that can be used to evaluate the city-wide impact of prevention.	Project will begin in 1997.

AIDS OFFICE STUDIES

STUDY	AGENCY	POPULATION	DESCRIPTION	STATUS
JUMP START	AIDS Office / SF City Clinic (CDC Funding)	MSM MSM-IDU MSM/F MSM/F-IDU	National pilot study designed to determine HIV seroconversion rates & associated co-factors among high risk negatives and determine willingness to participate in trials.	Seroconversion and risk behavior results were recently published.
HIV Vaccine Preparedness Study (HIVNET)	AIDS Office / SF City Clinic (NIH funding)	MSM MSM-IDU MSM/F MSM/F-IDU	National study designed to determine HIV seroconversion rates & associated co-factors among high risk negatives and determine their willingness to participate in a vaccine trial.	Preliminary seroconversion results and associated risk behaviors as well as participants willingness to participate in vaccine trials will be available 1997. Final results will be available 1988.
Linkages Study	AIDS Office / City Clinic (CDC supplemental and UARP funding)	High risk negatives tested at CTRPN sites. (All HPPC transmission groups).	Pilot study designed to evaluate the referrals of high risk negatives tested at the Municipal STD clinic. Will expand to other sites in 1997.	Pilot data available early 1997. Linkages two data available late 1997/early 1998.
Drug Treatment Center Incidence Study	AIDS Office / Westside Methadone Treatment Clinic. Extended to BART programs in 1988. (CDC Funding)	MSM-IDU MSM/F-IDU MSF-IDU FSF-IDU FSF/M-IDU FSM-IDU	Blinded incidence study of IDUs in methadone maintenance programs	Prevalence and incidence data will be available in 1998/1999 when results are unblinded .

AIDS OFFICE STUDIES

STUDY	AGENCY	POPULATION	DESCRIPTION	STATUS
High Risk Youth Survey (HRYS)	AIDS Office / Cole Street & Larkin Street Clinics. (CDC funding).	Homeless and runaway youth in clinic settings (All HPPC behavioral risk populations).	Prevalence & behavioral risk survey for high risk homeless youth	Data collection is complete. Results will be available in early 1997.
Women Who Have Sex w/ MSMs.	AIDS Office (CDC Supplemental funding)	FSF FSF-IDU FSF/M FSF/M-IDU FSM FSM-IDU	Exploratory needs assessment	Qualitative and quantitative data from 40 interviews will be available in early 1997.
Young Women's Survey (YWS)	AIDS Office / STD Control Program (CDC and State funding)	FSF FSF-IDU FSF/M FSF/M-IDU FSM FSM-IDU (18-29 years)	STD/HIV prevalence and risk behaviors of women who live in low income census tracts.	Initial data on the first 100 women is available. Final data will not be available until 1997.
Transgender Risk Behavior Study	AIDS Office, SF CBOs w/ Transgender services or support groups, Street Outreach Programs, Public Venues. (State funding)	FTM-pre/post op MTF-pre/post op (All HPPC behavioral risk populations)	Descriptive study designed to determine the prevention/health services needs and risk behaviors of different transgendered populations. Three phase study: 1) focus groups; 2) key informant interviews; 3) quantitative interviews.	Data from 11 focus groups designed to determine the prevention and health service needs will be available Fall 1996. Key informant interview and quantitative survey data will not be available until Spring 1997.

Exhibit 3.58
STD PREVENTION & CONTROL PROGRAM STUDIES

STUDY	AGENCY	POPULATION	DESCRIPTION	STATUS
Project RESPECT	STD Prevention & Control Program (CDC funding)	City Clinic Patients MSF MSF/IDU FSF FSF/IDU	Multicenter randomized trial comparing 3 counseling models for HIV prevention. Incident STD's, HIV, behavior change, and maintenance are the outcomes.	Initial data available Summer 1996. Final analysis will not be complete until 1997.
Heterosexual Intervention Project (HIP)	STD Prevention & Control Program (CDC funding)	City Clinic Patients MSF MSF/IDU FSM FSM/IDU	Compares standard counseling to enhanced counseling (4-session). Behavioral data and STD data used as outcomes.	Results will be available in early 1997.
City Clinic KABB Survey	STD Prevention & Control Program	City Clinic Patients (All HPPC transmission groups)	KABB survey administered to patients bi-annually.	Data available late 1996/early 1997.
Client Intake Survey	STD Prevention & Control Program	City Clinic Patients (All HPPC transmission groups)	Sexual and drug use behavior variables were added to the client intake form.	Data available on a regular basis.
City Clinic Seroincidence Study	STD Prevention & Control Program (CDC funding)	City Clinic Patients (All HPPC transmission groups)	Blinded incidence study of patients attending a STD clinic.	Initial results may be available in 1997.

Exhibit 3.59
CAPS AFFILIATED PROJECTS

STUDY	AGENCY	POPULATION	DESCRIPTION	STATUS
Understanding Sexual Risk Behavior in Gay Men Attending Public Sex Environments	UCSF ACRC 11/1/94-1995 PI: Susan Kegeles Co-PIs: Tracy Mayne & Bill Woods	394 gay men participated in the entry survey; 230 gay men participated in both entry and exit surveys.	One year project to study the sexual risk behavior of men frequenting sex clubs, bath houses and public cruising areas in San Francisco.	Data is collected. Manuscripts are being written.
Understanding Contextual and Phenomenological Issues Regarding Safe and Unsafe Sex Among Young Gay Men.	NIMH PI: Margaret Chesney Co-PIs: Susan Kegeles & Bob Hays	137 young gay men (aged 18-27) in San Francisco.	In depth interviews regarding safe and unsafe sexual situations and the meaning of safe sex.	Results will be available in the fall of 1997.
Enhancing Community Collaboration in the Implementation of HIV Vaccine Efficacy Trials among Gay Men in San Francisco.	CDC 1994-1997 PI: Susan Kegeles Co-PI: Bob Hays	In-depth interviews with 250 gay men and community leaders (age 18 and up)	This community assessment project will entail extensive use of qualitative research methods, with the goal of enhancing community collaboration in HIV vaccine efficacy trials. Although this is a multi-site project (there are two other sites), San Francisco is the only site concerning gay men.	Results expected in the winter of 1997

CAPS AFFILIATED PROJECTS

STUDY	AGENCY	POPULATION	DESCRIPTION	STATUS
Gay Urban Men's Survey (GUMS)	9/94-9/98 PI: Catania	5800 gay and bisexual men residing in gay neighborhoods in 10 urban areas of the United States.	GUMS will assess HIV risk factors, HIV disease related health practices, and AIDS related mental health problems among gay and bisexual men residing in 10 urban areas of the United States (San Francisco being one of them).	Start-Up Phase
Calendar History of Substance Use and Sexual Risk Taking	Funded by CDC PI: Ron Stall 1996 (not in the field yet) (will be conducted with GUMS)	96 gay/bisexual men in San Francisco to complete one hour, in person interviews. Will include African American, Latino, and European-American men.	A series of qualitative interviews with gay/bisexual men to determine the current reasons for ongoing high risk sexual behavior.	Analyzing data.
18th Street Services AIDS Risk Reduction Through Substance Abuse Counseling	NIAAA 1990-1995.	455 gay and bisexual substance abusers in San Francisco.		Project complete.

CAPS AFFILIATED PROJECTS

STUDY	AGENCY	POPULATION	DESCRIPTION	STATUS
Interventions to Change HIV Risk Behaviors in Hispanics	NIMH 4/1/96-3/31/96 PI: Barbara V. Martin Co-PI: Cynthia A. Gomez	Random digit dial telephone survey of 1600 unmarried Latino adults aged 18-49 from ten states in which 87% of Latinos in the U.S. reside.	Project to assess a model of culture and psychosocial factors predicting condom use in unmarried heterosexual Latino adults.	Data is collected. Manuscripts have been written.
Safe Sex Behavior With Primary and Other Partners Among Heterosexual HIV Discordant Couples	CDC; State Office of AIDS (1992-1995); PI: Nancy Padian Co- investigator: Ariane van der Straten, PhD, MPH.	242 participants to a cohort study of HIV transmission among HIV serodiscordant couples. Behavioral assessment with primary partner was conducted every six months. A short pilot behavioral assessment with outside partners was administered to 48 non-monogamous participants between 1993 and 1995.	For non-monogamous participants, sexual behavior with outside partners was compared to concurrent sexual behavior with a primary partner.	Study in summer of 1995.

CAPS AFFILIATED PROJECTS

STUDY	AGENCY	POPULATION	DESCRIPTION	STATUS
Risk Profile of Gay/ Bisexual Males Who Drop Out of Substance Abuse Treatment	UCSF ACRC: 7/1/95-6, PI: Ronald D. Stall, PhD, MPH Co-Investigator: Michael Crosby, PhD, MPH.	350 gay/bisexual men entering substance abuse treatment in San Francisco.	Secondary data analysis of gay male substance abusers who drop out of substance abuse treatment.	Results presented at the International Conference in Vancouver. Draft of paper being completed for peer review and submission to scientific journal. Expected submission by year end of 1996.
The Effect of Childhood Sexual Abuse on HIV Risk Taking Behavior among Gay and Bisexual Men	NIMH PI: Ron Stall Co-PI Tom Coates Co- Investigator: Sam Jinich, PhD	Random gay bar sample and list-frame telephone sample of 1941 gay and bisexual men residing in Portland and Tucson.	To report the prevalence of childhood sexual abuse among gay/bisexual men and to measure the association of childhood sexual abuse with high risk sexual behavior in adulthood.	Data is collected, manuscript has been written and submitted to journal for consideration. Results have been presented at three conferences: Responding to Child Maltreatment 1995, APHA 1995, and Vancouver 1996.
Promoting Safer Sex Practices among High Risk Repeat HIV Testers in San Francisco	NIMH 1997-1998 PI: Jim Dilley Co-PI: Bill Woods, Willi McFarland.	456 gay men repeat testers.	Four previous interviews based on "Self Justification" model	1996

CAPS AFFILIATED PROJECTS

STUDY	AGENCY	POPULATION	DESCRIPTION	STATUS
Community Mobilization for Primary and Secondary Prevention	NIMH Center for AIDS Prevention Studies, Thomas J. Coates PI	1139 gay men in Portland, Oregon. Participants recruited using two methods: a randomized time period technique to recruit male patrons of gay bars and a list-frame telephone sample of households.	Annual surveys used to evaluate 18-month community level intervention.	Data is collected and currently being analyzed.
An HIV Prevention Intervention for Young Gay Men	NIMH PI: Susan Kegeles CO-PI: Robert Hays	Cohorts of young gay men (aged 18-28) in Eugene and Santa Barbara were assessed pre and post community level intervention.	Community-level intervention was effective in reducing rates of unprotected anal intercourse in two different communities. Findings published in <i>American Journal of Public Health</i> 8/96.	Study completed. Intervention is being replicated in two larger communities.
Should HIV Prevention Strategies be Different for HIV-negative, HIV-positive and untested young gay men?	NIAID and NIMH PI: Warren Winkelstein	Population based sample of 408 gay and bisexual men in San Francisco (aged 18-29).	Prevalence and predictors of unprotected anal intercourse for each HIV status group were described. See attached reprint	Study completed. Manuscript in preparation.

IX. CO-FACTORS

Introduction

This section contains detailed discussion of twenty co-factors. A co-factor is a condition that can increase risk for HIV, increase susceptibility to infection, or decrease ability to receive and act upon HIV prevention messages. These factors, along with primary risks such as sharing unsterile needles and having unprotected sex, are critical considerations in HIV prevention planning and implementation. As Ralph DiClemente (1992) states,

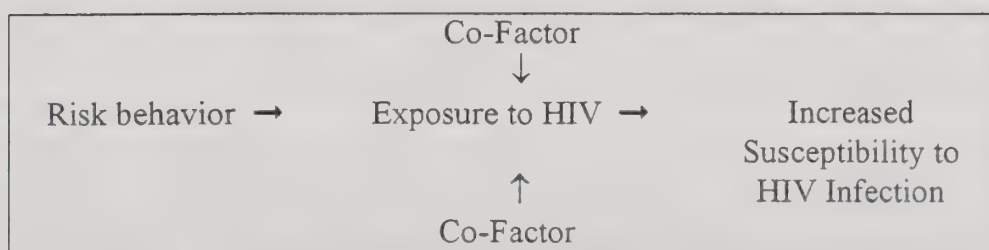
While HIV is the etiologic virus associated with disease, and while it is a necessary factor in disease pathogenesis, it is not, in and of itself, sufficient to drive the epidemic. People's behavior—more specifically, the lack of appropriate HIV-preventive behavior—propels the epidemic. Moreover, precisely because HIV links sexuality with disease, it is inextricably a sociocultural as well as biological phenomenon. Therefore, to understand the HIV/AIDS epidemic and the behaviors that result in infection, we must ultimately confront it as much in psychosocial and cultural terms as in biomedical terms.

To posit that a co-factor can increase risk for HIV or increase susceptibility to infection suggests two different phenomena. In the first case, the co-factor motivates or increases the likelihood of engaging in a risk behavior which may result in HIV infection. Examples may include low self-esteem, lack of social support, depression, commercial sex work, and low perception of risk. In the latter case, the co-factor does not necessarily influence behavior, but rather increases the likelihood that one would contract HIV if exposed to the virus. For example, the presence of an STD, malnutrition (often concomitant with poverty), and the immuno-suppressive effects of drugs may increase the likelihood of infection, given exposure to HIV. The two diagrams below represent these two concepts:

Co-Factor as Motivator for Behavior:

Co-Factor → Risk behavior → HIV infection

Co-Factor as Increasing Susceptibility:



Individuals may face multiple co-factors at once. In fact, certain clusters of co-factors tend to occur, such as poverty, discrimination, substance use, and STDs. Because these co-

factors are usually present in clusters, the ability to discern the contribution of a single co-factor to HIV risk or infection is limited. Several studies have examined clusters of co-factors (namely, depression, self-esteem, and lack of social support) and have used statistical methods such as multiple regression to distinguish the contribution of each. But there has been no study that includes measures of the entire set of co-factors with statistical techniques to assign the weight of one factor over another. In fact, such a study is difficult to imagine, because people are extremely complex beings with a great number of motivations. However, some studies have teased out the connection between one or more co-factors and HIV risk. In recent years, the methods used in these studies have improved the representation of people of color and women, and many of them are conducted with participants in San Francisco. So, while there are no definitive answers about the precise contribution of one or another co-factor to HIV risk, numerous studies provide evidence about the role that these co-factors play in the epidemic.

In writing this section, the use of research language is kept to a minimum and the citations to the original sources are provided for those interested. However, a few terms and techniques integral to the discussion of the link between a co-factor and HIV may need further explanation. The following defines the concepts.

The word *association* describes the link between a factor and HIV risk. Association implies that if one factor is affected, it is possible that the other factor will also be affected. For example, if there is a positive association between substance use and HIV infection, people who use substances will be more likely to be infected with HIV than people who do not. The sample shows, using fictitious data, a positive association between substance use and HIV infection. The table indicates that the majority of the people who use substances are also HIV-positive, while more of the people who do not use substances are HIV-negative. If an association did not exist between substance use and HIV infection, it would be expected that the distribution of users and non-users would be more evenly matched across the categories of HIV infection.

	HIV-positive	HIV-negative
Substance use	350	50
No substance use	150	450

Although associations are referred to as “positive” or “negative”, the terms do not indicate a “good” or “bad” value judgment. Rather, a positive association is one in which an increase in one factor is related to an outcome in another. Conversely, a negative association means that a decrease in one factor is related to a decrease in another.

Tests commonly used to measure associations are the Chi Square test, Pearson’s Correlation, and linear and logistic regression. Chi Square effects measure the association between two discrete factors (discrete means that the factors have only two options (i.e., “yes” or “no,” “over 18 years” or “under 18 years”). Pearson’s correlation measures the association between two continuous factors. Continuous means that the factors have an unlimited number of values (e.g., age, income). Linear regression allows researchers to build statistical models of

factors, such as income, that they suspect may contribute to a certain continuous outcome, such as a score on a self-esteem scale. Logistic regression is used to investigate statistical models of factors that may contribute to a dichotomous outcome, such as whether a person is HIV infected or not. Odds ratios are calculated from the results of logistic regression procedures.

An odds ratio indicates the intensity of an association and is expressed in terms of a ratio (i.e., what is the chance that one situation will happen given that another has occurred). For example, in the relationship between type of sexual contact (same-sex or heterosexual) and sexual activity among women, Bevier, et al. (1995) found that women reporting same sex contact were 4.1 times more likely to have three or more sexual partners than women reporting heterosexual contact. Thus, the ratio is expressed as 4.1:1; however, in a research article the first number is expressed and the other is assumed.

A second way to describe the link between two factors is in terms of a *causal* relationship, meaning that the existence of one factor is necessary for the existence of another. A causal relationship is stronger than that of an association. A causal relationship means that whenever the cause is present the effect will most likely occur. An association, on the other hand, means that when one factor is present it is *possible* that the other factor will be present, such as the association between substance use and HIV infection. In HIV research it is difficult to assess causality in its purest sense because a factor, such as unprotected sex, does not always cause HIV infection.

In research terms, rules are used to determine causality. First, the cause must happen before the effect. Second, a change in the cause must bring about the change in the effect. Third, a relationship must not be able to be explained by another factor which influences both the cause and the effect

Confounding factors muddle the results of research studies and researchers must identify and take them into account in their analysis. Although they are difficult to detect, identifying them provides a more accurate description of the problem. For example, in some studies it may appear that there is an association between substance use and risk behaviors. However, if the data are sorted by age, it may be discovered that younger men are more likely than older men to engage in both substance use and risky behavior. Thus, in this example, age is a better predictor of risk behavior than substance use, and was confounding the original association.

Predict is another term that is used in the discussion of co-factors. In social science research, prediction does not imply the ability to see into the future and know how something will turn out (such as whether a person will become infected). Rather, it is a statistical term which indicates how strongly one factor is associated with another factor. For example, if it is stated that a history of an STD predicts HIV infection among a particular sample of people, it means that in statistical analysis there is a stronger association between having had an STD and HIV infection compared to the associations between any other factor and HIV infection.

Statistical significance refers to the probability that an association between factors found in a sample of people accurately represents the association in the larger population from which

the sample was taken or whether the result was more likely due to chance. Statistical significance is expressed in terms of “p-values,” which indicate the percent (from 0% to 100%) probability that the findings were due to chance. Thus, as the p-value approaches 1.0 ($p=1.0$) the more certain the findings were due to chance. P-values lower than .05 are generally considered significant because there is 5% or less probability that the findings are due to chance.

Finally, a *cohort* is a group of people that is being observed, usually over a period of time. Examples of cohorts are a graduating class, a group of diabetics, a town population, or a group of gay men. In cohort studies, it must be remembered that all members in the group age over time, so that any changes observed may be due to aging rather than any interventions received.

The terms “African American” and “Black” or “Hispanic” and “Latino” are used in this section to reflect the terminology of the articles discussed.

It must be stressed that the set of co-factors described in this section is not exhaustive. There are many more factors that increase risk among those in specific target groups, and providers conducting needs assessments should examine the presence of these.

For each co-factor, the following questions are addressed:

- How strong is the connection between that co-factor and HIV risk?
- How does that co-factor increase risk?
- Who has that co-factor?

BIOLOGICAL CO-FACTORS

Biological co-factors primarily include STDs, although poverty and substance use also have components that can be considered biological co-factors.

Sexually Transmitted Diseases (STDs)

The presence of an STD other than HIV, such as gonorrhea or syphilis, may indicate risk for HIV infection. Research on the connection between STDs and HIV has focused on: 1) discordant couples in the U.S., Europe, and Italy; 2) prostitutes in Africa (particularly Nairobi, Kenya), and 3) persons in U.S. criminal justice systems.

What Is the Connection Between STDs and HIV?

There are two connections between STDs and HIV: a behavioral link and a biological link. The behavioral link reflects that HIV and other STDs share sexual behavior as their common transmission vector. People who have been diagnosed with an STD may be more likely than someone who has not had an STD to use condoms during sex, assuming that they responded to the diagnosis as a “wake-up call.” Also, clinicians may use the opportunity of an STD diagnosis as an intervention moment to provide HIV prevention counseling. In this way, a prior STD could indicate a high level of current HIV-preventive behaviors. On the other hand, a prior or current STD could indicate a low level of condom use, and thus a higher risk for HIV.

The biological link between STDs and HIV shows increased HIV risk among people with an STD. Specifically, people with ulcerative STDs are more susceptible to contracting HIV if exposed to HIV than those without an STD. Following are discussions of both the behavioral and biological links.

The Behavioral Link

The research findings on the connection between a prior diagnosis of an STD and current sexual behavior are mixed. While some studies have found a definitive link between regular condom use and an STD history, others suggest a weak link between preventive sexual practices and a prior STD diagnosis. In a large sample of inner-city clinics, researchers found regular condom use to be associated with both a past and current diagnosis of STDs (Senie, 1991 cited in O’Campo et al., 1992). Other studies have found no link between an STD history and condom use or other STD-prevention methods. For example, in a study of Black Bay Area adolescents who use crack cocaine (Fullilove et al. 1990a), found that adolescents who had an STD history were no more likely to have used a condom in their last sexual encounter than were those with no STD history: “There is no evidence, in other words, that a previous STD episode has resulted in greater efforts to prevent further exposure.” Additionally, O’Campo and colleagues’ (1992) study of low-income urban pregnant women found that there was a very weak relationship between STD history and current protective behavior.

Additionally, Brooks (1987) found that repeated episodes of STDs and a failure to practice STD prevention methods “may reflect an enduring set of high-risk behaviors” (O’Campo et al., 1992). Pepin et al. (1989) found that having had a previous episode of an STD is associated with a higher risk of subsequent HIV infection, which they attribute to an increased likelihood of continued high-risk sexual behaviors. Although routine patient education about STD prevention is called for, “it is questionable whether this standard is being met” (O’Campo et al., 1992).

The lack of STD-preventive behavior may be due to a low perception of STD risk. For example, in a study of low-income urban pregnant women at Johns Hopkins Hospital, O’Campo and colleagues (1992) found that although 40% of the women had at least one STD, almost all (95%) perceived themselves to be at somewhat low or very low risk for getting an STD during the next year—even though only 19% reported consistently using adequate methods of STD/HIV prevention. Furthermore, the women generally believed that the risk of HIV infection was increased a little (but not much) with a history of an STD (O’Campo et al., 1992).

The Biological Link

The biological link between STDs and HIV infection is generally a strong one. Several large studies in Europe, Africa, and the U.S. have found that a history of an STD, particularly the presence of genital ulcers, increases the risk of HIV transmission (DeGruttola, 1989; Kennedy, 1993; Plummer, 1991). Interestingly, Padian’s 1987 study of women sexual partners of HIV-positive men did not find this connection. Instead, the results indicate that the number of episodes of STDs were similar among all women, regardless of their partners’ HIV status. In fact, HIV seronegative women actually had more STDs (and more sexual partners) than seropositive women, although the finding was not statistically significant (Padian, 1987).²

Mayers and Johnson (1995) point to multiple African reports which have established that “even when the number of sexual partners and other parameters of sexual behavior are controlled for in analysis, there is a higher HIV seroprevalence among subjects with genital ulcer disease.” In a study of prostitutes in Nairobi, researchers found that genital ulcers appeared to be a major risk factor for HIV acquisition (Plummer, 1991). Furthermore, the researchers found that the women who experienced frequent ulcer episodes (caused by an STD) were more likely to seroconvert than those who experienced less frequent episodes. Women with a rate of ulcers of more than one episode per year were at much higher risk of HIV infection. Among women who regularly used condoms, the presence of genital ulcer disease did not increase risk for HIV (Plummer, 1991).

² Several studies, including Padian’s (1987) and Plummer’s (1991) indicate that anal intercourse between women and men can also account for part of the variation between women who contract HIV and those who do not. African studies also posit that female to male transmission may be increased by an intact foreskin, genital ulcers, or the presence of blood during intercourse (Kennedy, 1993).

While genital ulcers appear to increase risk in the absence of condom use, consensus is not established for other STDs. In fact, there has been a paucity of studies of common non-ulcerative STDs (e.g., chlamydia and gonorrhea) as risk factors for HIV seroconversion among high-risk US heterosexuals. In a Florida study of women convicted of sex-related crimes, a higher percentage of those who were HIV-positive on their first HIV test also had syphilis than those who were HIV-negative; however, gonorrhea infection rates were similar between the two groups (Onorato, 1995). Of Dade County convicted prostitutes who had repeated contacts with the criminal justice system and therefore repeated HIV tests, a higher percent of those who seroconverted since their first HIV test had a new syphilis episode (56%) compared to those who did not seroconvert (28%). The higher STD rate among those seroconverting held true for gonorrhea as well: 46% of those seroconverting had a new gonorrhea infection compared to 19% of those who did not seroconvert. This study indicates that syphilis, and to a lesser degree gonorrhea, may play an important role in seroconversion (Onorato, 1995).

Mayers and Anderson (1995) report that significant associations between syphilis and HIV have been found in the majority of studies; however, the association between HIV risk and genital herpes simplex virus (HSV-2) is inconclusive. Those with a long-standing HSV-2 infection may be at higher risk depending on the specific time when ulcerative lesions are present on the genitals. These genital sores enable HIV to pass into the body more efficiently (Mayers and Anderson, 1995). Anogenital warts have also been associated with HIV infection (Mayers and Anderson, 1995), as has *C. Trachomatis* infection (Plummer, 1991). In a study of urban African sex workers, chlamydia was found to be associated with HIV seroconversion, while gonorrhea was not clearly associated (Mayers and Anderson, 1995).

Several studies connected syphilis, gonorrhea, and other STDs with HIV, but could not make explicit whether that connection was behaviorally based or biologically based. In other words, it is often impossible to know among groups who seroconvert that also have higher rates of STDs whether seroconversion occurs because they are engaging more frequently in higher risk acts than those who do not seroconvert, or because an STD infection makes them more susceptible. Certainly, those with a history of one or more STDs are at increased risk for HIV if they do not change their risky behaviors. These findings indicate the need for a cross-over between HIV and STD prevention messages: the need for HIV and STD prevention providers to educate and counsel clients about both STDs and HIV prevention. Finally, there is a need for HIV prevention providers to make special efforts to identify and reach those among their target population who have prior or current STDs.

How Do STDs Increase HIV Risk?

STDs generally increase HIV risk through biological means. (For a medically-oriented description, please see Mayers and Anderson, 1995.) Ulcerative genital diseases, both in men and women, increase HIV risk by causing mucosal discontinuity in the genitalia. These sores allow HIV-cells to enter (and leave) the body directly. In men, “the opportunity for HIV-1 infection is significantly increased if lesions, microabrasions, or inflammation are present on the penis or within the penile urethra because the virus could then bypass the epithelial barriers to infect cells in the connective tissue and blood and lymphatic vessels” (Mayers and Anderson,

1995). In women, “genital ulcers can increase the number of HIV-susceptible cells in the female genital tract mucosa. *C. trachomatis* operates in much the same way as genital ulcer disease: a trachomatic infection produces an intense subepithelial mononuclear cell inflammatory response in the cervix as well as microulcerations” (Plummer, 1991).

Nonulcerative STDs, such as chlamydia, can cause inflammation in women. The inflammation can cause genital erosion which makes HIV-negative women more likely to contract HIV through intercourse. HIV-infected women with genital inflammation may also be more likely to shed virus cells into their cervical/vaginal secretions, and thus may more easily infect men (Mayers and Anderson, 1995). The physical makeup of male genitals, especially for uncircumcised men, may also be a means for HIV infection. The foreskin and urethra are potential sites of HIV entry during intercourse with an HIV-infected person. The Langerhans cells, which live in the foreskin of an uncircumcised man’s penis, can provide a defense function, but can also serve as host cells for HIV. The same is true of the penile urethra; the lymphocytes, macrophages, and Langerhans cells in the urethra can also provide targets for HIV infection (Mayers and Anderson, 1995).

Who has STDs?

STDs are found more often among young people, age 19 and under. DiClemente (1990) points out that the rates of STDs drop exponentially past age 19. For women 10 to 14 years and 15 to 19 years, the rate of gonorrhea is about the same: 3,500 per 100,000 sexually active women (DiClemente, 1990). Rates of STD infections appear to be high among transgender commercial sex workers, compared to biologically-female sex workers, although studies of this issue are scarce. For example, in a study of 235 male-to-female transgender prostitutes in Atlanta, 25% showed evidence of past syphilis infection (McKeganey, 1994).

Exhibits 3.59 through 3.66 display information about STDs in San Francisco. These exhibits consistently portray high STD rates among African Americans, Native Americans, and young persons. Data by ethnicity and age (not displayed) consistently show the highest rates of gonorrhea rates among teenage Black women. Exhibit 3.59 shows that women have higher odds of gonorrhea infections even than injection drug-using men.

Exhibit 3.59**Estimates of Risk for Current HIV Infection for City Clinic Patients Who Had a Current Gonorrhea or Syphilis Diagnosis (1990-1995)**

	Gonorrhea (OR)	Early Syphilis (OR)
Females who have...		
Sex with males	3.17	2.87
Sex with males - IDU	2.86	1.45
Males who have...		
Sex with males	1.51	1.56
Sex with males - IDU	1.31	1.50
Sex with females	1.60	2.47
Sex with females - IDU	2.04	2.26

Source: City Clinic

Exhibits 3.60, 3.61, and 3.62 show STD rates by ethnicity over time. Please note the different scales to the left of each graph; gonorrhea rates are up to 3,500 per 100,000, while syphilis rates are less than 600 per 100,000. Exhibit 3.60 shows that by far the highest rates of gonorrhea have been among African Americans. Rates are declining in most groups, although among Native Americans, rates are increasing. Syphilis rates have declined among African Americans, and more recently among Native Americans, and have remained low among Asians, Whites, and Latinos. Exhibit 3.62 shows that chlamydia rates are particularly high among African Americans, and also high among Native Americans and Latinos.

Exhibits 3.63 through 3.66 show gonorrhea and syphilis rates for females and males by age. These exhibits show marked drops in the rates over time, yet rates among young women continue to be high compared to women out of their teens. Compared to 1989, when teenage men had higher rates than older men, by 1993 the higher rates were among men in their twenties. While rates have declined markedly since 1990, the general pattern of distribution holds. Exhibit 3.66 shows that, among men, syphilis rates in 1990 were highest among those in their early 30s. While the rates have dropped, the pattern of age distribution has shifted to older males.

Exhibit 3.60
Gonorrhea Case Rates per 100,000, by Ethnicity: 1989 - 1993

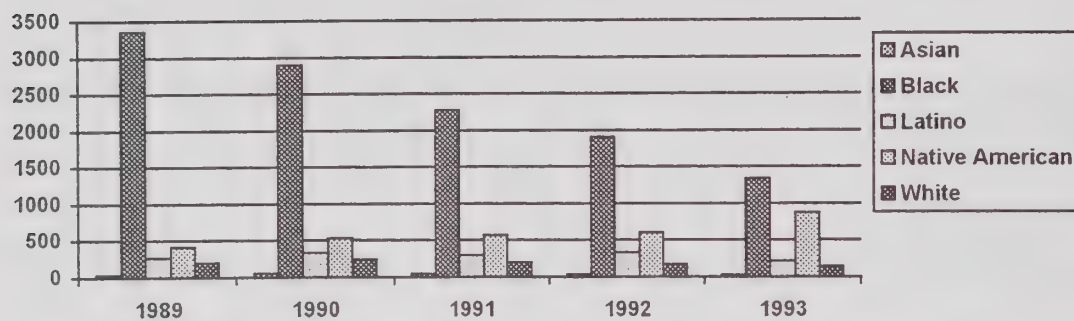


Exhibit 3.61
Early Syphilis Case Rates per 100,000, by Ethnicity: 1989 - 1993

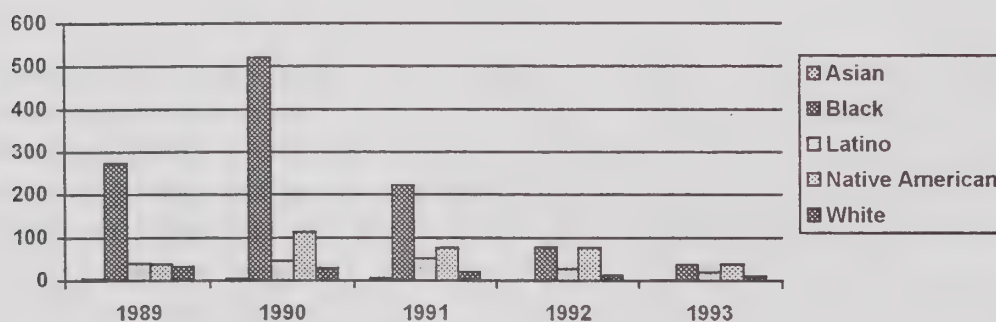


Exhibit 3.62
Chlamydia Case Rates per 100,000, by Ethnicity: 1990 - 1994

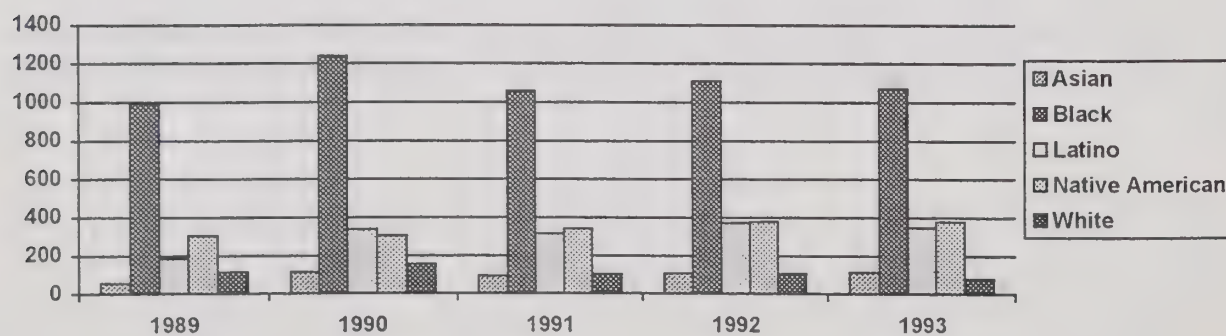


Exhibit 3.63
Gonorrhea Case Rates per 100,000 Among Females, by Age: 1989 and 1993

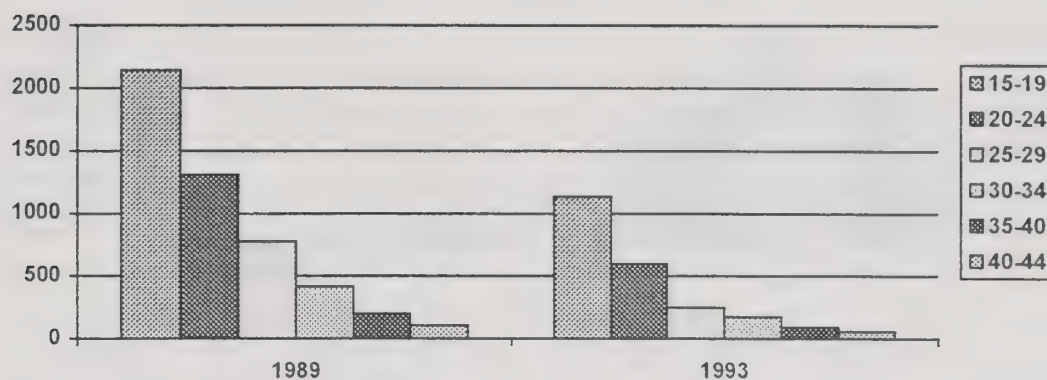


Exhibit 3.64
Gonorrhea Case Rates per 100,000 Among Males, by Age: 1989 and 1993

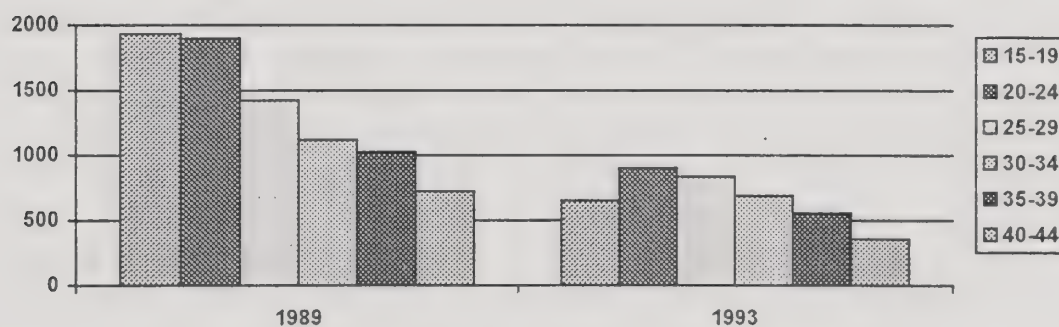


Exhibit 3.65
Early Syphilis Case Rates per 100,000 Among Females, by Age: 1990 and 1994

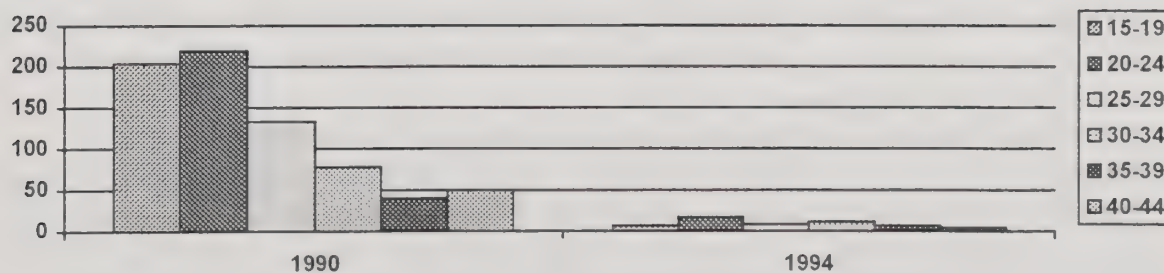
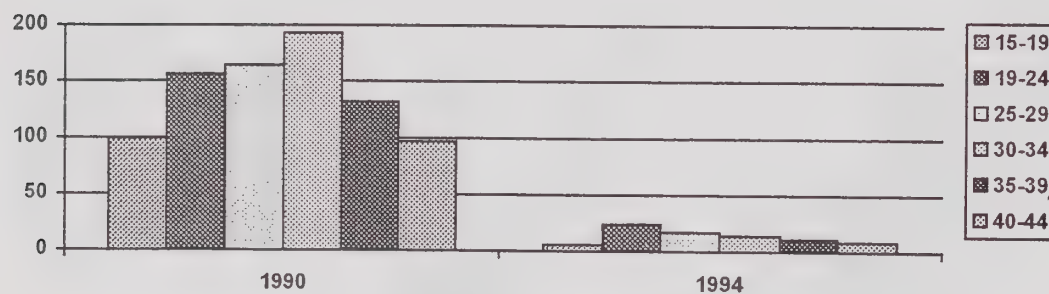


Exhibit 3.66
Early Syphilis Case Rates per 100,000 Among Males, by Age: 1990 and 1994



ECONOMIC CO-FACTORS

The economic co-factor category includes poverty and its more extreme condition, homelessness.

Poverty

Studies of the relationship between socioeconomic status and HIV risk primarily focus on those living in impoverished conditions. Poverty is most commonly defined in terms of income, i.e., the 1990 Census defined those living in poverty as a family of four with an annual income of less than \$12,674. “Impoverished conditions” may refer to employment status (e.g., unemployed or underemployed people), sources of income such as living on disability (SSI) or other financial assistance, low educational attainment, and substandard housing. This section discusses the link between poverty and HIV risk; the next section focuses on the more extreme condition of homelessness and its relation to HIV risk.

What is the Connection Between Poverty and HIV Risk?

Low socioeconomic status is one of the most consistent determinants of poor health status. Impoverished individuals experience greater incidence and mortality rates for most major chronic diseases and infections (Haan et al., 1987; Syme et al., 1976), including HIV infection (Krueger et al., 1990). Studies that have considered poverty independent of individual behaviors have found a relationship between poverty and an increased likelihood of premature mortality. Haan et al. (1987) analyzed extensive data from an Alameda County study and found that residence in a federally-defined poverty area is associated with increased risk of death. They adjusted their analysis to control for the effects of other important risk factors such as smoking, medical care access, and baseline physical health status. These authors propose that poverty area residents’ exposure to higher crime rates, poorer housing, lack of transportation, and higher levels of environmental contaminants explain this association.

Risk of HIV infection is no exception to the list of health hazards that poor people experience disproportionately compared with people of higher socioeconomic status. Researchers have explored many possible explanations for this phenomenon and have considered individual behaviors, access to health services, and social and physical environments as potential reasons. Each of these provide at least a partial understanding of why people of low socioeconomic status are at increased risk for HIV infection.

In an important study of 2,766 male county clinic clients in Seattle, Krueger et al. (1990) found that people below the federal poverty line were more likely to be HIV infected. This association remained statistically significant even after the researchers factored into their analysis other issues, such as race and specific risk behavior. The authors report that this important finding is the first of its kind linking income to HIV seropositivity independent of race.

In addition to the evidence that poverty may increase the likelihood of HIV infection directly, there is substantial data indicating that behaviors and conditions associated with poverty increase risk for HIV infection. For example, low income individuals in the above-mentioned study were more than twice as likely to inject drugs than people above the designated poverty line. Of the injection drug users (IDUs) in this study who shared needles to inject drugs, 73% were impoverished (Krueger et al., 1990).

Many poor people may cope with the stress of financial instability by engaging in behaviors such as substance use and commercial sex work which are known to increase HIV risk. In a sample of 250 low income individuals accessing services at a clinic in Los Angeles County, Linn et al. (1990) found high levels of substance use comparable to rates reported for homeless populations: approximately half of the low income individuals reported drinking alcohol several times a week or more often and 34% had used at least one other substance. Marijuana and crack cocaine (31% and 13% of the low income individuals using, respectively) were the most frequently used drugs and another 8% used injection drugs.

Commercial sex work may sometimes seem the best subsistence option for impoverished people, particularly women whose access to employment options may be restricted. As Shayne and Kaplan (1991) explain, “safe sex is an economic compromise” when a paying sex partner offers more goods for unprotected sex. People involved in commercial sex work also have multiple partners, increasing exposure for potential HIV infection.

A national survey of the general adult population (Anderson and Dahlberg, 1992) and the San Francisco-based AIDS in Multi-Ethnic Neighborhoods (AMEN) study (Peterson et al., 1992) both report that people with low income were more likely than people of higher income to have multiple sex partners. Similarly, Catania et al. (1992) reported that, of their national sample of 10,630 heterosexual adults, low income individuals were more likely than those in other socioeconomic strata to have a risky partner, i.e., a partner who is HIV-positive, used substances intravenously in the past five years, or has multiple partners.

Barriers to HIV prevention imposed by living in impoverished conditions increase HIV risk for the poor. The poor may deny their level of HIV risk to reduce the anxiety that would be created by a “more realistic assessment of vulnerability” (Shayne and Kaplan, 1991). Low perception of HIV risk has been associated with increased likelihood of involvement in risky sex and drug use behaviors (Petosa and Jackson, 1991). Similarly, Mays and Cochran (1988) explain that poor women often prioritize more immediate survival needs, such as finding sufficient food and shelter, over issues that have longer-term implications, such as HIV infection. If HIV prevention is a low priority, it is unlikely that people will change the behaviors necessary to prevent infection.

Many of the effects of living in poverty discussed here (e.g., substance use, commercial sex work, multiple sexual partners) are detailed in other sections. While these behaviors and conditions provide a context for understanding why poor people are at increased risk for HIV infection, recent findings caution a focus on individual factors such as behavior and access to services (Haan et al., 1987). Explanations for the poor’s increased risk for HIV that only

consider the individual level scapegoat those people who are experiencing the effects of poverty and ignore the larger social and political responsibility to address its root causes.

How Does Poverty Increase HIV Risk?

Poor nutrition that often accompanies poverty (Gelberg and Linn, 1988) may increase one's susceptibility to HIV infection. For example, women whose health is compromised due to poor nutrition may have weakened vaginal walls that are more susceptible to bleeding. Broken or irritated vaginal tissue increases the likelihood that semen to blood transmission of HIV will occur during intercourse with an HIV-infected partner (San Francisco HIV Prevention Plan, 1995).

Other ways in which poverty increases HIV risk were previously mentioned and are discussed in greater detail in other sections. A summary of these points includes:

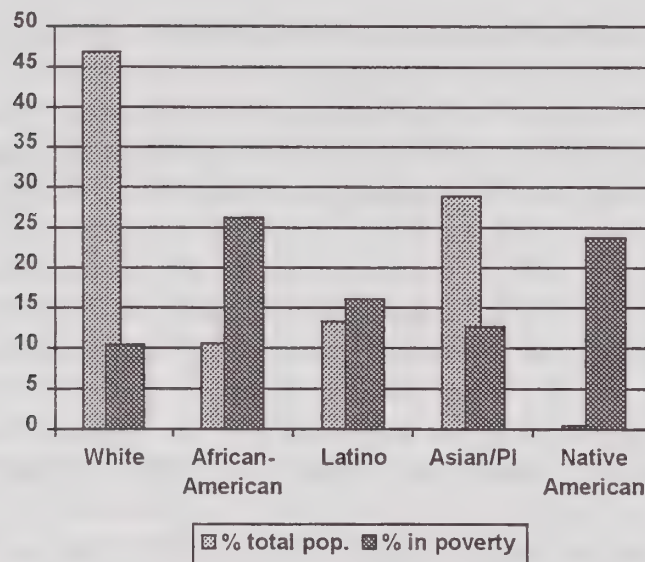
- Higher rates of injection drug use among the poor, as compared with people of higher socioeconomic status, increases the likelihood of blood transmission through needle-sharing.
- Multiple sexual partners increase the likelihood of exposure to an HIV-infected person, and thus increase the risk of the virus being transmitted sexually.
- Impoverished people who engage in commercial sex work as a subsistence pattern have a greater number of sexual partners than those who do not exchange sex for goods.
- Commercial sex workers also tend to have sexual partners who are themselves at greater risk for HIV.
- Low perception of risk for HIV among the poor and prioritizing immediate survival needs over long-term health issues decrease the likelihood that poor individuals will take HIV protective measures in general.

Who Is Poor?

According to 1990 Census data, 13% of all San Franciscans live under the federally designated poverty line. Children under 6 years old in San Francisco are disproportionately represented among the poor; 18% of this group live in poverty. Exhibit 3.67 shows that according to 1990 Census data, people of color are disproportionately represented among San Francisco residents living in poverty.

Although African Americans account for only 11% of the total San Francisco population, 26% of African American residents live in poverty. Similarly, 13% of the total San Francisco population is Latina/o yet 16% of Latina/os are poor; although 0.4% of the total San Francisco population is Native American, yet 24% of Native Americans are poor.

Exhibit 3.67
Ethnicity of San Francisco Total Population and Percent Living in Poverty



Women in San Francisco are slightly more likely than men to be below the poverty line. According to U.S. Census data for San Francisco, 13% of San Francisco women live in poverty, compared to 12% of San Francisco men. The combination of factors that affect socioeconomic status, such as race/ethnicity and gender, would show that women of color are even more disproportionately poor than both men in general and people of color in general.

Homelessness

San Francisco's homeless population is a broadly heterogeneous group. This diversity is explained largely by the various circumstances that are often referred to under the rubric of homelessness, the demographic diversity of the population, and the range of reasons for becoming homeless. There are also varying degrees of homelessness, the most severe of which necessitates living on the streets, in abandoned buildings, in shelters, or any space not designated for shelter (e.g., cars). A less severe although unstable condition refers to those temporarily staying with friends or family, in single room occupancy hotels, in a room or apartment but without financial stability to continue paying for housing, and/or without a permanent address.

Homelessness is a more extreme form of poverty and therefore many of the associated risks previously discussed apply. However, economics is only one of many factors that may lead to homelessness. Domestic violence and child abuse, youth runaway behavior, substance use, physical and mental disabilities, and unexpected crises may also result in homelessness (Crawford et al., 1993; Kennedy, 1991). This section discusses the link between homelessness and HIV risk. Issues that all homeless people face are presented generally and the different experiences and issues that homeless women and youth face are highlighted.

What Is the Connection Between Homelessness and HIV Risk?

Very few formal studies of the extent to which homelessness increases risk for HIV have been conducted. However, many studies consider the risk behaviors of the population and make associations based on these data. These studies, combined with HIV seroprevalence rates for homeless populations and extrapolation from the data on poverty and HIV risk, suggest that homelessness is a powerful co-factor for HIV infection.

HIV seroprevalence data for homeless populations is almost entirely from small samples of subpopulations accessing shelter or community clinic services. Therefore, there is little reliable seroprevalence data that can be used to make general statements about the extent of HIV infection among homeless populations. Nonetheless, estimates provided to date are consistently higher—possibly by as much as two times (Fetter and Larson, 1990)—for homeless people than for their domiciled counterparts. Some of these estimates, as presented in Tynes et al. (1993), are:

- Among homeless men using a New York shelter, 45% tested HIV-positive during a routine health examination.
- 21% of 162 patients anonymously tested at a medical clinic for the homeless were HIV-positive.
- Approximately 10% to 14% of the homeless accessing services at a clinic in Miami tested HIV-positive.
- Among a large sample of 2,667 homeless and runaway youth, 5% were seropositive for HIV antibodies.
- 8% of the homeless and runaway youth accessing services at a medical clinic in San Francisco tested HIV-positive.

As mentioned in a previous section, Krueger et al. (1990) found that people below the federal poverty line were more likely to be HIV-infected even after controlling for other issues such as race and specific risk behavior. Also, Haan et al. (1987) found that residence in a federally-defined poverty area is associated with increased risk of death. These findings are likely applicable to homeless populations, given that homelessness is an impoverished condition. Coupling this inference with the seroprevalence estimates provided above, homeless populations appear to be disproportionately represented in the distribution of HIV infection.

Behaviors and circumstances associated with homelessness further contribute to homeless populations' risk for HIV. Injection drug use appears to be more common among homeless populations than in the general population. St. Lawrence and Brasfield (1995) found that 20% of 94 homeless men and women in Jackson, Mississippi injected drugs and shared needles. In their sample of 250 domiciled yet impoverished subjects and 214 homeless subjects, Linn et al. (1990) found that injection drug use was twice as prevalent among the homeless men and women compared to the domiciled subjects. Similarly, 24% of 101 adolescents assessed at a shelter for runaway and homeless youth reported injection drug use (Tynes et al., 1993). Among

a sample of 460 homeless women in Los Angeles County, 8% reported current injection drug use (Nyamathi, 1992).

Homeless injection drugs users may be at higher risk for HIV infection compared to domiciled injection drug users. Kral et al. (1996) conducted a large study of 955 adult, street-based injection drug users in the cities of Richmond and Oakland, California. They found that homeless injection drug users were two times as likely compared to their domiciled counterparts to share syringes in the 30 days prior to being interviewed for the study. Additionally, they reported that the homeless injection drug users in their sample were almost twice as likely compared to their domiciled counterparts to share other injection supplies in the 30 days prior to study participation (Kral et al., 1996).

Unprotected sexual intercourse may be more common among homeless populations than those living in stable situations. Immediate survival needs are typically the top priority for this population, and therefore they are unlikely to use scarce resources to purchase condoms. Additionally, for the homeless who get by through commercial sex work, sex may have a powerful economic component which compels unsafe decisions (Shayne and Kaplan, 1991). For example, in a Centers for Disease Control and Prevention (CDC) study of 110 homeless African American men in Miami, only 49% reported using condoms at least one time during the past 30 days (St. Lawrence and Brasfield, 1995). Preliminary data from the San Francisco homeless youth AIDS Evaluation of Street Outreach Project (AESOP) reveal that only 16% of the young women and 26% of the young men had safe sex with their main partner every time they had sex (Clements et al., 1995).

Impaired mental health status is a factor which may not only lead to homelessness but also may contribute to HIV risk (Tynes et al., 1993). Many studies report that homeless populations have mental health problems with greater frequency and severity than the general population (Linn et al., 1990; Tynes et al., 1993). Tynes and colleagues suggest that 30% to 40% of the homeless have major psychiatric disorders such as schizophrenia and bipolar disorder, and that 10% to 20% are dually diagnosed with a severe mental illness and a substance abuse disorder. These chronically mentally ill homeless individuals may exhibit higher levels of HIV risk behavior because of: 1) hypersexuality associated with particular diagnoses, 2) poor impulse control, 3) self-destructive tendencies, 4) impaired judgment, 5) lack of awareness of risks, and 5) potential for sexual victimization. The combined risk for HIV from behaviors associated with mental health issues and substance use may be extremely serious for those dually diagnosed.

Homeless populations may use non-injection substances at higher rates than those in stable living situations in an attempt to make their circumstances seem more tolerable or to mask the pain of difficult life histories. Among homeless male and female clinic users in Los Angeles County, 20% had been hospitalized for alcoholism, 31% had ever been arrested for an alcohol-related incident, and 46% had used at least one other psychoactive substance in the past month (Linn et al., 1990). Based on a 1988 United Way survey, an estimated 30% to 60% of all the homeless in San Francisco have a drug or alcohol problem (Comprehensive Housing Affordability Strategy, 1994). Nearly 57% of 460 African American homeless women in Los

Angeles used non-injection drugs in a study conducted by Nyamathi (1992). Of homeless youth in San Francisco surveyed as part of the AIDS Evaluation of Street Outreach Project (AESOP), 41% had ever used crack and 20% drank alcohol daily (Clements et al., 1995).

By virtue of their lack of shelter, homeless populations are more exposed to street activity, including incidents of physical and sexual violence. Given the power dynamic implicit in violent acts, homeless women are disproportionately affected (Koegel, 1987). Fisher et al. (1995) report that 42% of their sample of homeless women had been battered in the past year and 56% had been raped. Often, these violent incidents are not the first for these victims; many homeless women and others living on the streets come from violent histories of child physical and sexual abuse (Linn et al., 1990). Though the literature primarily focuses on how these issues of violence affect women, homeless young men and women and other populations are also vulnerable.

Many homeless people engage in commercial sex to get goods or money they need or want. Commercial sex work is more common among homeless women, though homeless men and youth are also known to be involved. One quarter of the 460 homeless African American women studied in Los Angeles County currently engaged in commercial sex (Nyamathi, 1992). Among 100 homeless youth accessing services at Larkin Street Youth Center in San Francisco, approximately 40% reported having exchanged sex for goods (Kennedy, 1991). As mentioned in other sections, commercial sex workers typically have more sexual partners than those not exchanging sex for goods and thus are more frequently exposed to the possibility of HIV infection.

HIV prevention among homeless populations presents similar barriers as among impoverished people. Some studies suggest that certain homeless populations may not perceive themselves as being at risk for HIV, given persisting perceptions that HIV/AIDS is a “gay, White disease” (Crawford, 1993). Additionally, homeless populations’ denial of their actual risk may relieve anxiety that would be produced by concern about HIV infection (Shayne and Kaplan, 1991). The homeless overall typically must prioritize immediate survival needs over longer-term health issues. This present-oriented focus diminishes the probability that homeless populations will take HIV preventive measures.

Homelessness also poses unique barriers to HIV prevention. Access to HIV prevention materials may be limited for the homeless. Furthermore, these populations’ transience, lack of stability, substance use, mental health, and other issues make them extremely difficult to reach with prevention messages (Fetter and Larson, 1990; Tynes et al., 1993).

How Does Homelessness Increase HIV Risk?

In a study of 19 agencies serving homeless populations across the country, service providers consistently reported that the homeless may be at increased risk for HIV transmission if exposed to the virus (Fetter and Larson, 1990). These providers explained that “poor health due to substance abuse, chronic infections (particularly untreated sexually transmitted diseases and chronic hepatitis B) and inadequate nutrition indirectly compromises host defenses and may

play a role in vulnerability to HIV infection.” As mentioned in previous sections, poor nutrition may weaken vaginal tissue, creating a more immediate vector for the virus to transmit during sexual intercourse (San Francisco HIV Prevention Plan, 1995).

Other ways in which homelessness increases HIV risk were previously mentioned and are discussed in greater detail in other sections. A summary of these points includes:

- High prevalence of injection drug use among the homeless, compared to people in stable living situations increases the likelihood of blood transmission through needle-sharing.
- Low rates of condom use among the homeless, compared to domiciled groups, increases the likelihood of HIV transmission during sexual intercourse.
- Disproportionately high rates of chronic and severe mental health issues among the homeless, compared to housed groups, contributes to higher rates of unprotected sex and substance use.
- Homeless populations have extremely high rates of non-injection substance use. Substance use during sex impairs judgment and reduces the likelihood that protective measures will be taken.
- Subsistence by means of commercial sex work increases one’s number of sexual partners and contacts. Commercial sex workers also tend to have sexual partners who are themselves at greater risk for HIV.
- Exposure to physical and sexual violence forces those homeless people who are victimized into circumstances out of their control. Unsafe sex is a particular problem for those who are raped, particularly women and young people.
- Low perception of risk for HIV among the homeless and focusing on immediate survival needs decrease the likelihood of HIV-protective measures in general.
- Homeless populations are extremely difficult to reach with HIV prevention messages.

Who Are “The Homeless” in San Francisco?

There is no single discrete group of people in San Francisco who can be called and counted “the homeless.” Therefore, estimating the population size and diversity requires consideration of various sources. For example, U.S. Census procedures estimate the size of the homeless populations in many U.S. cities by adding together people staying in emergency shelters, institutionalized settings and others “visible on the streets.” Based on the 1990 Census counts, the total homeless population in San Francisco is between 6,000 and 8,000 people. The accuracy of these data is clearly limited, however, given that the Census is not designed to capture information on such hard-to-reach populations as the homeless. These figures are considered to be outdated, and extremely low.

A composite picture of San Francisco homeless populations’ sizes is provided by other sources. The San Francisco Mayor’s Office of Housing’s Comprehensive Housing Affordability Strategy (1994) gathered estimates through alternative methods, and considered shelter use data, numbers of people turned away from shelters, people who experience episodic homelessness during the course of a year. Based on this approach, the number of homeless in San Francisco is estimated between 11,000 and 16,000.

Agencies that serve runaway and homeless youth and homeless women provide populations estimates specific to these groups. The San Francisco Homeless Youth Network estimates that there are approximately 2,000 homeless and runaway youth in San Francisco (San Francisco HIV Prevention Plan, 1995). Between July, 1992 and June, 1993, 2,000 women and children were turned away from the 45 beds in 2 emergency shelters that are set aside for those escaping domestic violence (Comprehensive Housing Affordability Strategy, 1994).

The Health Care for the Homeless Program reported in 1987 that the ethnic breakdown of the homeless population in San Francisco is 54% Caucasian, 32% African American, 9% Latino, 2% Asian and 1% Native American. Comparing these figures with 1990 Census data, Whites (47%), African Americans (11%) and Native Americans (0.4%) are overrepresented among the homeless. Youth are believed to comprise up to 20%, families 20%, single women 30%, and single men 45% of the total homeless population in San Francisco (Comprehensive Housing Affordability Strategy, 1994).

ABUSE-RELATED CO-FACTORS

Abusive experiences tend to have behavioral implications for those who survive them. The abuse-related co-factors discussed here—history of child sexual abuse, abusive relationships, and rape—have been linked to behavioral risks for HIV.

History of Child Sexual Abuse

A number of studies have related a history of childhood sexual abuse to subsequent behaviors which are also considered co-factors for HIV infection, e.g., substance abuse and prostitution. Several investigators have reviewed earlier studies to bring together information specifically relating childhood sexual abuse to risk for HIV. In addition, empirical studies in the U.S. have examined possible correlations between childhood sexual abuse and HIV infection. One study of New York City resident Puerto Rican males who have sex with males and another of gay/bisexual men in Portland, OR and Tucson, AZ that consider the correlation between a history of childhood sexual abuse and involvement in unprotected anal intercourse are also included.

There is no standard definition of what constitutes childhood sexual abuse. Generally researchers define experiences of abuse as ones in which there is a clear power differential between the perpetrator and survivor. In the case of childhood sexual abuse, the power differential exists at least as a result of significant age/developmental difference between perpetrator and survivor. Estimates of the incidence of childhood sexual abuse vary widely, in part due to differences in the way sexual abuse is defined and in the different ages that are included under the heading of childhood.

What Is the Connection Between a History of Childhood Sexual Abuse and HIV?

The most direct connection between childhood sexual abuse and HIV is that transmission may occur during the unwanted sexual act. There appears to be relatively little data on the incidence of this mode of transmission (see the brief discussion and references cited in Bartholow et al., 1994). It is also possible that tissue abrasion from sexual abuse could increase the youth's risk of HIV infection from other (nonabusive) sexual relations.

Many studies present evidence that persons with a history of childhood sexual abuse are more likely to be at risk for HIV infection than those without such a history. In one study, men who reported early sexual abuse were twice as likely to be HIV-positive as men who did not report that experience (Zierler et al., 1991). In another study, homosexual men who reported childhood sexual abuse were 1.45 times as likely to have tested HIV-positive as their nonabused counterparts (Bartholow et al., 1994).

A number of studies indicate that there are psychological and behavioral manifestations associated with childhood sexual abuse and that these manifestations may increase the probability of sexual and/or drug-using behaviors that pose a risk for HIV infection. Those

behaviors include various kinds of substance use, both the direct risk of sharing needles and co-factor use of drugs or alcohol, and high-risk sexual behaviors such as unprotected anal intercourse and prostitution. However, these studies also differed in their findings: while some found a strong correlation between childhood sexual abuse and a particular risk behavior, other studies did not find a correlation with that behavior, but with another behavior. Differences in findings may be due to differences in the effects of childhood sexual abuse on different populations, or differences in research methodology or definitions.

In assessing the role of childhood sexual abuse as a co-factor in HIV risk, a number of studies indicate that it may be a very important one: "We have evidence that early sexual abuse is associated with behavioral outcomes that may be having devastating effects on the public health, particularly in relation to the HIV epidemic" (Zierler et al., 1991). Also, Allers et al. (1993) posit that, "During the second decade of the AIDS epidemic, it is plausible that the unidentified survivors of childhood abuse may surface as being dangerously at risk for HIV infection." In their longitudinal study of the association of physical and sexual abuse with HIV risk factors, Cunningham and colleagues (1994) said, "Our study indicates that those youths who have experienced abuse are more likely than those who were not abused to increase their involvement with HIV risk behaviors by the time they reach young adulthood," but they also specify that the "likelihood of HIV risk behavior involvement varies with the type of abuse experienced and the race and gender of the youth."

Carballo-Diéguez and colleagues (1995) conducted a study of 182 adult New York City resident Puerto Rican males who have sex with males that considered the relationship between a history of childhood sexual abuse and involvement in unprotected anal intercourse. For the purposes of the study, abuse was defined as having experienced, before the age of 13 years, sex with a partner at least four years their senior and who felt hurt by the experience and/or were unwilling to participate in it (Carballo-Diéguez et al., 1995). Their analysis found that among the 113 respondents who had receptive anal intercourse in the past 12 months, those with a history of childhood sexual abuse were more likely than those without such a history to not have used protection.

Similar results were found by Jinich and colleagues (1996) in a population-based study of 1,941 adult gay and bisexual men in Portland, OR and Tucson, AZ that assessed the prevalence of childhood sexual abuse among these men and measured "the association of childhood sexual abuse with high risk sexual behavior in adulthood" (Jinich et al., 1996). For the purposes of their analyses, abuse was defined as having had sex before the age of 13 years old with someone at least five years older and having had sex between the ages of 13 and 15 years old with someone at least ten years older, to clearly indicate a power differential between the perpetrator and survivor. They report that, "Significantly more respondents who met the criteria for abuse (12%) engaged in significantly riskier sexual behaviors than those with no such experience (8%)" (Jinich et al., 1996). Additionally, they found that, "Greater perceived coercion was associated with greater likelihood of having unprotected anal intercourse with non-primary partners. A total of 15% of nonabused and 17% of abused-not coerced men engaged in unprotected anal intercourse during the past year, compared to 22% of those who reported mild coercion and 24% of those who reported strong coercion or physical force" (Jinich et al., 1996).

The study of 602 youth by Cunningham and colleagues (1994), however, reports findings that appear to differ sharply from those of other studies. The investigators assessed differences in demographic characteristics and the number and type of risk behaviors between participants with a single kind of abuse, multiple types of abuse, and no history of abuse. The types of abuse they defined are physical abuse (“hit or beaten by a parent or guardian”), rape (“violently forced into sexual intercourse”), and sexual abuse (“pressured into having sex or made to have sex with someone other than when raped”). They found that “being sexually abused (versus not abused at all) did not contribute to involvement in HIV risk behaviors in youth or young adulthood.” However, the authors did find that, “Although being sexually abused is not associated with risky behavior when it occurs alone, when it occurs with other forms of abuse it becomes an important determinant of risk behavior. Being both beaten and raped, without being sexually abused, does not contribute to involvement in higher numbers of HIV risk related behaviors, but when sexual abuse is a component of the multiple abuse, multiple abuse is associated with higher mean numbers of risky behaviors in adolescence and in young adulthood.”

Findings about the correlation of a history of sexual abuse and injection drug use were not consistent. In the Zierler et al. (1991) study, there was only a weak correlation of childhood sexual abuse and injection drug use. In a study of school children, those males reporting sexual abuse were nine times as likely as the nonabused males to have injected drugs and ten times as likely to have shared needles. The females reporting sexual abuse were three times as likely as nonabused females to have injected drugs and 15 times as likely to have shared needles (Lodico et al., 1994). As the authors note, the findings of the Bartholow and colleagues (1994) study differ in several respects from other studies. Unlike the Zierler and colleagues study, Bartholow and colleagues found the abused men in the study were 2.53 times as likely as those not reporting abuse to have used injection drugs at some time, whereas Zierler and colleagues found the weaker odds of 1.2.

One study found that, overall, those who reported childhood sexual abuse were four times as likely to have engaged in prostitution as their nonabused counterparts; for men, that rose to a figure of eight times as likely (Zierler et al., 1991). In another study, homosexual men who reported abuse were more than twice as likely as the others to have exchanged sex for drugs or money; they were 2.6 times as likely to have a positive syphilis serology (Bartholow et al., 1994).

Homosexual men reporting sexual abuse were significantly more likely than their nonabused counterparts to have had unprotected anal intercourse in the pre-interview four months (Bartholow et al., 1994). One study found that those with a history of childhood abuse were twice as likely to have had multiple sex partners (Zierler et al., 1991). In a study of school children, the females reporting abuse were also 2.4 times as likely to have been pregnant and nearly five times as likely to have been sexually active by age 12 (Lodico et al., 1994). In a study of school children, males who reported a history of childhood sexual abuse were almost six times as likely as their nonabused counterparts to report having gotten a girl pregnant. Males reporting sexual abuse by an adult were 16 times more likely than the other males to report both

having been forced to have sex by a friend or date and to have forced someone else to have sex (Lodico et al., 1994).

One of the characteristics of survivors of childhood sexual abuse, according to Allers and colleagues (1993), is sexual compulsivity. Citing Pincu (1989), Allers and colleagues say this is defined as “sex used to sublimate needs (such as intimacy or affection) and mask feelings (such as boredom or isolation).” This kind of sex is said to become part of an addictive process that leads to an increase in the number of sexual partners, and so to increased HIV risk. However, Bartholow and colleagues (1994) found that “measures commonly cited as indicators of ‘sexual compulsion’ (e.g., frequency and perceived control of sexual behaviors) did not differ between abused and nonabused study respondents.” One more finding in which the Bartholow and colleagues study differs from others regards maintaining relationships with significant others. Bartholow and colleagues refer to five previous studies which reported that maintaining such relationships were difficult for sexually abused men and women, but “observed no difference in the level of perceived ability to maintain intimate relationships between abused and nonabused men” (1994).

There is evidence from a number of studies that survivors of sexual abuse are more likely to use more alcohol and other drugs than are their nonabused counterparts. For survivors of sexual abuse, substance abuse generally may be a part of a cycle to escape emotional pain, which then results in an even greater sense of shame and self-hatred. The consequent state of emotional depression and hopelessness may lead to increased risk-taking behaviors. Substance abuse may also result in impaired judgment in regard to risk in both sexual and injection behaviors. Substance abuse may lead to the exchange of sex for drugs or for money with which to purchase drugs, and in these circumstances condom use is unlikely. Women who reported childhood sexual abuse were twice as likely to be heavy consumers of alcohol as those who did not report that experience (Zierler et al., 1991). Males who reported abuse were twice as likely to drink before having sex (Lodico et al., 1994).

Bartholow and colleagues say, “We also observed that sexual abuse was related to an earlier age of substance use onset; this finding has not been previously reported.” They found that the abused men in their study began using tobacco, cocaine, stimulants, opiates, hallucinogens, and marijuana at significantly younger ages than nonabused users (Bartholow et al., 1994). However, Fountain and colleagues (1993), in a study of 112 randomly selected methadone treatment clients, found that “abused drug addicts began using drugs other than alcohol at a later age than nonabused clients. All measures (first use, first regular use, first narcotic use, first regular narcotic use) indicated that abused clients initiated drug use at a significantly later age.” In addition to the differences in the populations studied, these contrasting results may relate to different definitions of abuse; Fountain and colleagues are including emotional abuse and physical abuse, as well as sexual abuse.

Allers and his colleagues (1993) state that one characteristic of survivors of childhood sexual abuse is chronic depression. They cite Kaliski et al. (1990) that the sexually abused adolescent is at higher risk of HIV because of a focus on present survival that outweighs any concerns for the future, and because depression-related passive suicidality may include high-risk

behaviors. Courtois (1988) is also cited as reporting that survivors experiencing depression also report helplessness, lethargy, and self destructive thoughts and behaviors.

None of the studies examined in this review reported extensive data on chronic depression as mediating a history of sexual abuse and increased risk of HIV infection. However, Cunningham and colleagues, citing Allen and Tarnowski (1989) and Stiffman (1989), report that abused adolescents have more behavioral, mental health, and drug problems, are more depressed, and engage in riskier sexual practices such as prostitution.

Bartholow and colleagues (1994) report that, compared with nonabused men, abused men were more likely to have been involved in mental health counseling and to have reported mental health hospitalization; they were more likely to have been hospitalized for substance abuse, including alcohol; for depression; and for suicidal thoughts or actions. They also cite several clinical studies that associate childhood sexual abuse with increased mental health problems, including attempted suicide and post-traumatic stress disorder. They further cite findings from a National Institute of Mental Health study (Stein et al., 1988) that indicate that sexually abused male respondents were more likely than abused women or nonabused male controls to have any DSM-III diagnosis.

In addition to direct correlations between childhood sexual abuse and HIV risk behaviors, some authors have proposed that a history of sexual abuse may render one less able to respond to HIV prevention education. Rosenfeld and Lewis (1993) state that most HIV prevention education programs include components on knowledge about HIV and components on developing and practicing risk reduction skills, to help make the transition from abstract knowledge to behavior change. However, as survivors begin to develop intimate relationships, strong feelings related to their childhood sexual abuse may surface. Their strategies for dealing with these feelings may prevent them from applying what they have learned. The authors say, "Consequently, the dynamics of childhood sexual abuse make it very difficult for survivors to apply knowledge and skills they've learned about preventing the spread of HIV in situations in which they are face-to-face or sexually intimate with a partner." Polonsky and colleagues (1994) suggest that HIV prevention strategies for the incarcerated also need "to address not only risk-reduction methods, but also victimization issues and barriers to behavior change such as lack of self-esteem and low motivation for self protection."

How Does a History of Child Sexual Abuse Increase HIV Risk?

A summary of the ways in which a history of child sexual abuse may increase risk include:

- High rates of injection drug use;
- High rates of adult prostitution; and
- Tendency to have multiple partners and use drugs or alcohol heavily.

Who Has a History of Child Sexual Abuse?

The studies examined found widely varying prevalence rates for childhood sexual abuse. One reason for this is the differing definitions that were utilized. In some cases “childhood” abuse was defined as sexual intercourse occurring at anytime before age 18 with a partner over 18 years of age; in other cases the definition of childhood was more restrictive. There is also variation in the questions asked to determine if there was sexual abuse.

The incidence of childhood sexual abuse appears to be much higher for women than for men. None of the research examined found any significant differences in the prevalence of childhood sexual abuse on the basis of race or ethnicity. Citing Finkelhor (1987), Zierler and colleagues say that prevalence studies among free-living adults have estimated that from 6% to 62% of women and from 3% to 31% of men were sexually abused before the age of 18; when the definition is limited to children under 14 years of age who reported physical contact of a sexual nature, estimates range from 28% to 36% percent of the population. (Zierler et al., 1991)

In a survey of over 5,000 White 9th and 12th grade school children (51% male and 49% female), 9% reported having been sexually abused—a prevalence of 15% for the females and 3% for the males (Lodico, 1994). A much higher prevalence rate was found in the widely cited study by Zierler and colleagues. In a sample of 186 heterosexual adults, 22% reported that they had been sexually abused in childhood or adolescence—28% of the women and 15% of the men reporting abuse. In this study, the questionnaire was administered by an HIV counselor or nurse clinician. Determination of a history of sexual abuse was based on the question, “Have you ever been raped or forced to have sex?” Only those who said they had such an experience before age 18 were included in the percentages cited (Zierler et al., 1991).

In the Jinich and colleagues (1996) study, the prevalence of childhood sexual abuse among their sample of self-identified gay and bisexual men was 28%, based on their restrictive definition of childhood sexual abuse described earlier. The study by Bartholow and colleagues (1994) found similar results: 37% of the 1,001 male homosexual and bisexual respondents reported that “as a child or adolescent they had been encouraged or forced by an older or more powerful person to engage in sexual contact.” Since some of these respondents did not meet the study’s developmental criteria for sexual abuse, they report a 34% prevalence rate of childhood sexual abuse. This is the highest rate for men found in the literature—more than twice the rate reported in the Zierler and colleagues study and more than ten times the rate reported in the Lodico et al. study.

Bartholow and colleagues state that prevalence of a history of sexual abuse is generally higher among homosexual men than among heterosexual men. The authors cite articles which suggest that some of the correlate factors between a history of childhood sexual abuse and male homosexual identity may include feminine behavior, lack of secondary sexual characteristics, and the lack of peer and familial support during sexual identity development. Such dispositions, they propose, may prompt gay youth to seek sexual contacts in environments where there is increased risk of sexual abuse.

While the evidence clearly indicates that the prevalence of childhood sexual abuse is high among homosexual and bisexual men, Bartholow and colleagues warn that there is a general lack of recognition of sexual abuse among males, both homosexual and heterosexual. Sociocultural factors such as a male ethic of self-reliance and the expected values of being tough, aggressive, and competitive make it more difficult for males to disclose sexual victimization. Considerations of homophobia and the fear of being thought to be homosexual may also contribute to the underreporting and general lack of recognition of childhood sexual abuse of males.

Allers and colleagues (1993) identify that populations of teenage runaways, the homeless, and adults with chronic emotional disturbances (e.g., depression) are all “composed of a significantly large number of childhood sexual abuse survivors.” Fisher and colleagues (1995) state that there is a “higher prevalence of abuse history in homeless than in domiciled women.” Peinkofer (1994) reports that children with a hearing handicap are at higher risk for sexual abuse and for incest behaviors than are their hearing peers.

Polonsky and colleagues (1994) cite two jail surveys. In the first (1989), more than 31% of the women had been abused before the age of 18. Those who reported abuse also reported a higher incidence of drug use in general and of frequent drug use in particular. In a more recent survey (1991), one third of the women reported sexual or physical abuse before the age of 18 years.

In the County of San Francisco in 1993, there were 1,146 reported cases of child sexual abuse. These data represent a low estimate of the actual incidence of child sexual abuse, given that underreporting of this issue is common.

History of Abusive Relationships

There is evidence that a history of childhood sexual abuse may predispose involvement in adult abusive relationships. There is also evidence that abusive relationships themselves may be a consideration for HIV infection.

What Is the Connection Between a History of Abusive Relationships and HIV Risk?

In their enumeration of clinical symptoms in adult survivors of childhood sexual abuse, Allers and colleagues (1993) discuss revictimization: “research on childhood abuse reports that persons who were physically and/or sexually abused are significantly more likely to experience rape and/or physical battering in their adult relationships.” Characteristics of these relationships include placing the needs of sexual partners over the needs of self, learned helplessness, and an inability to identify others who are trustworthy.

Such relationships may also include a threat of physical harm, so that it is even more difficult for survivors to insist on safer sex practices without risking further injury. Abusive sexual activity in adult relationships may also result in abrasions which could increase the risk of HIV transmission.

Zorza (1991) found that battery and domestic violence in abusive relationships are important causes of homelessness among women. In a study of 53 women who had been homeless at least three months in the last year, Fisher and colleagues (1995) found that 86% of them had been battered before homelessness. Homelessness, however, exposed these women to high rates of battery and of rape; to reduce their physical risks, homeless women may rely on one man for protection from violence—a man who may be an injection drug user or otherwise at high risk for HIV. Women in such a dependent relationship may not be able to negotiate safe sex. The authors conclude, “Being homeless may require lifestyles that increase the risk of HIV infection and transmission.” For women, abusive relationships often result in homelessness to escape the injury, but the homelessness further exposes them to risks through rape or through the survival mechanisms of prostitution or of finding a protector.

Miller and colleagues (1989) compared samples of alcoholic and of nonalcoholic women. They found that the alcoholic women had higher levels of negative verbal interaction, moderate violence, and severe violence as compared to the nonalcoholic women. From this study (and other articles cited by the authors), it would appear that alcoholic women are at greater risk of being in abusive relationships. The alcohol abuse itself is likely to increase their risk behavior in regard to HIV, and the combination of substance abuse and abusive relationships would be expected to increase their risk.

In two jail surveys cited by Polonsky and colleague (1994), in 1989 44% of the females and 13 percent of the males reported having been sexually or physically abused; in 1991 43% of the females and 12% of the males reported having been sexually or physically abused.

How Do Abusive Relationships Increase HIV Risk?

The primary ways in which abusive relationships may increase risk include:

- If the threat of physical harm is present, as it is in abusive relationships, condom negotiation will probably not occur.
- The risk of becoming homeless is greater among women in abusive relationships; homelessness carries risk for HIV (described in a previous section).
- There appears to be higher rates of substance use/abuse among those in abusive relationships.
- Often certain psychological traits occur among those in abusive relationships, such as learned helplessness and the inability to identify others who are trustworthy. These traits can inhibit careful selection of partners.

Who Has a History of Abusive Relationships?

As mentioned above, there is a close relationship between people who have a history of child sexual abuse and those who have abusive relationships as adults. Therefore, much of the information provided in the previous section applies.

Rape

Rape is any sexual assault or forced sexual encounter regardless of the type of contact or relationship to perpetrator. Since rape implies a loss of power and control over an individual's desires and intentions, survivors typically experience emotional, cognitive, and physical trauma. Power dynamics and sexist perceptions of women as property have contributed to the overwhelming number of rapes committed by men against women. Given that rape survivors are usually women, most studies have focused on their experiences. Nonetheless, rape is known to occur between people of the same sex and occasionally by women against men.

What Is the Connection Between Rape and HIV Infection?

The most clear connection between rape and HIV infection exists through the possibility of sexual transmission from assailant to victim. Irwin and colleagues (1995) believe the risk of infection during rape is low since the estimated probability of male to female HIV transmission during a single act of vaginal-penile intercourse is less than 2 per 1,000 acts. This conclusion assumes that the risk profile of male assailants resembles that of the general male population and that the sexual acts committed during rape are no more risky than consensual acts. However, studies report that the characteristics of assailants and the sex acts committed during rape may increase the risk of HIV infection for the survivor. Obviously, the victim of a rape has no control over using condoms (Irwin et al., 1995).

Forced sexual acts are often characterized by violence and aggression. Violent and aggressive sex can cause genital and anal tissue to rupture in both the survivor and the assailant, as well as cause other trauma which can provide a more immediate venue for viral transmission. Given that during rape women often experience anal penetration—which is considered an efficient mode of sexual HIV transmission—risk for infection is additionally increased.

Rape perpetrators tend to exhibit certain behaviors and risk factors which increase their likelihood of being HIV-infected prior to rape episodes. For example, assailants may engage in sex with multiple partners and may use substances at rates that are higher than those who do not victimize others. These behaviors increase the likelihood that assailants have other sexually transmitted diseases. The risks of HIV transmission associated with STDs are discussed in another section.

It is estimated that up to 25% of the women who are sexually assaulted are “gang raped,” or forced to have sex by a group of men during a single assault episode (Irwin et al., 1995). An increase in the number of assailants means an increase in the number of potential exposures to HIV infection. Gang rape poses a particular threat of HIV infection to those who survive it.

Rape is known to cause psychological effects for survivors that may increase their risk for HIV infection in subsequent sexual encounters. Vassall asserts that “the negative effect of sexual assault undermines the survivor's ability to develop and use the personal skills needed for HIV risk reduction and prevention” (San Francisco HIV Prevention Plan, 1995). Post-traumatic stress, depression, and feelings of powerlessness can all contribute to a decreased sense of self-

efficacy, particularly during sexual encounters. Many studies note the importance of self-efficacy for implementing HIV self-protective measures (see “Strategies and Interventions” chapter).

How Does Rape Increase HIV Risk?

Characteristics of rape perpetrators and sexual acts typical of rape episodes may increase the risk of HIV infection during rape:

- condoms are rarely used during sexual assault;
- violence and aggression that often accompany forced sex may rupture genital, anal, and other tissue so that a more immediate venue for viral transmission is created;
- assailants may have multiple sexual partners and use substances more than non-sex offenders, increasing their risk of being HIV-infected;
- assailants may have STDs at higher rates than non-sex offenders; and
- rape by multiple assailants increases the probability of exposure to a HIV infection.

Furthermore, rape survivors suffer psychological trauma that may decrease their ability to negotiate protective measures during sexual encounters that follow the rape episode.

Who Experiences Rape?

While anyone may be a potential target for rape, certain groups of men, women, and children appear more vulnerable. Rape of men may be more likely among those in institutions (particularly prison) than among those not institutionalized. Furthermore, men (either in or out of jail) appearing vulnerable and feminine are more often the target of rape than those who appear able to defend themselves.

Irwin et al. (1995) cite studies indicating that between 9% and 24% of American women will be raped at least once in their lifetimes, and that more than 680,000 women are raped in the U.S. each year. The addition of other factors, such as homelessness, commercial sex work, and substance use (particularly crack use), increases vulnerability. For example, Fisher et al. (1995) found that homeless women were more likely than domiciled women to be raped.

The sample of women in the Irwin study was recruited from communities in which there is a high incidence of poverty and crack use. Of the 1104 women in their sample, almost 14% had been raped within the last year. These women were recruited from Miami, New York City, and San Francisco; the women from New York City were more than twice as likely to have been raped in the past year as either those from Miami or San Francisco.

Based on their study evidence, Irwin and colleagues believe that estimates of rape frequency that rely on reports to police, rape crisis centers, and medical facilities grossly underestimate the number of cases of forced sex. In San Francisco County in 1993, there were 92 arrests for forcible sex; six of which were in the juvenile justice system (California Criminal Justice Profile, 1993). These numbers poorly represent the actual occurrence of rape.

PSYCHOLOGICAL CO-FACTORS

Examples of psychological co-factors include social support, mental health stressors, and self-esteem.

Social Support

Social support is a multidimensional phenomenon. Descriptions of social support in the literature usually include the following components:

- 1) the size of the social support network;
- 2) the characteristics of those in the support network;
- 3) the specific supportive acts such as:
 - emotionally-sustaining behaviors (e.g., someone to talk to);
 - problem-solving behaviors (e.g., someone who offers suggestions);
 - indirect personal influence (e.g., someone who conveys a willingness to help);
 - environmental action (e.g., someone who manipulates the environment to reduce stress); (Nyamathi, 1991)
- 4) subjective appraisal of support, specifically a feeling that:
 - one is cared for and loved;
 - one is esteemed and valued;
 - one belongs to a network of communication and mutual obligation (El-Bassel and Schilling, 1994).

What Is the Connection Between Social Support and HIV Risk?

A number of studies have found a connection between personal and social resources—including social support—and positive health practices (Hobfoll and Lerman, 1988; Muhlenkamp and Sayles, 1986; Kobasa et al., 1985). These studies have been conducted for the most part with socioeconomically and environmentally advantaged persons. Among the vulnerable populations that are often targeted for HIV prevention, it appears that social support has less effect on HIV disease prevention (Nyamathi, 1991).

The connection between social support and HIV appears to be stronger among gay men, especially White gay men, than among other populations affected by HIV. Several studies conducted by the Center for AIDS Prevention Studies (CAPS) show that White gay and bisexual men who did not engage in unprotected anal intercourse sought more social support for stressful events in their lives than those who did engage in unprotected intercourse. Further more, changes in condom use were associated with higher levels of social support from informal sources of help, such as friends and lovers, but not from formal sources of help, such as physicians and psychologists (Folkman et al., 1992; Catania et al., 1991).

Peterson et al. (1993) conducted a study with African American gay and bisexual men to see if the same relationship described above was found between social support, help-seeking

behavior, and HIV prevention practices. Similar to the White cohort, those African American men who engaged in unprotected anal intercourse reported less social support for changing their behavior than men who did not engage in this behavior. However, the proportion of African American gay and bisexual men engaging in unprotected anal intercourse was much higher than among White gay and bisexual men. These findings suggest that many gay and bisexual African American men have not received the social support needed to change their behavior. It is also possible, the authors point out, that the help-seeking patterns and norms of the African American gay men differ from those of White gay men, and that men of a higher social class may have greater access to sources of help and may be more likely to utilize these sources when needed.

While the CAPS studies show that among White (and to a lesser degree, African American) gay and bisexual men there is a connection between social support and HIV, the literature suggests that this connection is weak in other populations. Nyamathi (1991) undertook a study of women particularly vulnerable to HIV: African American and Hispanic injection drug users, partners of drug users, and homeless women. She found that the availability of support did not contribute significantly to lowering risk behaviors. Comparing her findings to others in the field, she speculates that “social support may not play as influential a role in mediating stressful events among homeless persons who experience multiple life crises and limited economic resources. It may be that the support available to women who face more stressors on a daily basis is inferior and not as effective as that of participants in the studies of Hobfoll and Lerman and Muhlenkamp and Sayles” (Nyamathi, 1991).

Among drug users in a San Francisco treatment center, social support was not directly related to sexual risk behaviors. However, social support (emotional and material support) was highly correlated with self-esteem (Nemoto et al., 1993). A study of African American, Latina, and White women on methadone maintenance found that participants’ self-reported levels of social support were not associated with sexual risk behavior; specifically, social support did not effect frequency of condom use or frequency of sex with injection drug users. In addition, the size of the network had no effect on attitudes toward safer sex, negotiation of safer sex, or sexual risk behavior (El-Bassel and Schilling, 1994).

Female injection drug users in New York City’s central jail facility for women at Rikers Island were more likely to be seropositive if their friends engaged in risky injection practices (Magura et al., 1993). This finding, of no surprise to prevention providers, stresses the point that the composition of one’s support network can be a benefit or a detriment to protecting one’s health, depending on the group norms.

How Does Social Support Reduce Risk?

As described above, it appears that social support does not reduce risk in all populations. However, among those populations for whom social support reduces HIV risk, “social support acts as a resource providing encouragement to the recipient, and as such promotes health protection” (Kobasa et al., 1985). Social support is considered a major factor that enables individuals to perceive stressors as less threatening and has been seen as a buffer of the adverse health effects of stress (Nyamathi, 1991).

Some studies suggest that social networks can reduce HIV transmission associated with drug use (El-Bassel and Schilling 1994; Des Jarlais and Hunt, 1988). On the other hand, social networks can increase risk in groups where the social norm encourages risk-taking or ignores risk—groups such as injection drug-using networks that have not adopted safe needle practices or groups of adolescents and young adults in which the boys gain status for fathering babies from many girls. In these situations, addressing social norms and developing new social norms is a precursor to behavior change.

A study of long-term homeless women in San Diego points to ways in which social support can increase risk. Women who had a specific man to protect them from harm were at much higher risk for HIV than were women who did not have such a man, because this “protector” himself was at high risk for HIV. Homeless women are better off in terms of HIV risk if they are on their own on the streets, although they are at much higher risk for rape, robbery, and beatings (Fisher et al., 1995).

Who Receives Social Support?

The specific group who receives social support is difficult to target. While there are many studies on social support, they tend to have conflicting findings. For example, a study of women on methadone found that African American respondents were more likely to have more persons to turn to for support than Latinas or White Anglos (El-Bassel and Schilling, 1994) while Nyamathi’s study (1991) of vulnerable women found no significant differences in social support by ethnicity.

The study of a San Francisco substance abuse treatment center revealed that participants who had only one sex partner had higher emotional support than those who had more than one sex partner or no sex partner (Nemoto et al., 1993). The methadone study found that perceived levels of social support did not vary by age, marital status, employment, or number of years on methadone maintenance (El-Bassel and Schilling, 1994). Women who had a higher level of education and who had never been in jail were likely to feel loved by, respected by, and involved with family, friends, and others. Women who had been in jail tended to report fewer individuals to whom they can turn for support (El-Bassel and Schilling, 1994).

A study of HIV-infected women and men attending a clinic in North Carolina suggests that there are differences between women and men in the availability and usefulness of social support and coping strategies. Overall, men rated social support as more available and more useful than did women. On the surface, this finding is contrary to previous research on gender and social support, suggesting that social support may not serve the same function for HIV-infected women as for women in general. However, most of the men in this study were White, and most of the women were Black (Fish et al., n.d.).

In terms of social support’s effect on HIV prevention, it is tentatively suggested that the issue is less social support per se and more the norms of the support network. Those support networks that emphasize healthy behaviors are more likely to help people reduce their risk for

HIV. While these social norms are more easily established in middle-class populations where the daily stressors are fewer, social norms that emphasize safer needle practices can be established in injection drug using social networks, as well.

Mental Health Stressors

Mental health stressors may be episodic or chronic conditions. For example, anxiety and depression may be of short duration or may be ongoing issues. Schizophrenia and manic-depressive illness are examples of chronic conditions that require lifetime treatment. Stresses on mental health functioning influence thought and decision-making processes and can hinder physical functioning, as well. These influences can increase risk for HIV infection. This section describes the effect on HIV risk of chronic mental illness and depression.

What Is the Connection Between Mental Health Stressors and HIV Risk?

Chronic Mental Illness

Few studies have assessed HIV seroprevalence among the chronically mentally ill. Those that have are based on in-patient psychiatric hospital populations. For example, of 451 admissions to two New York City hospitals, almost 6% were found to be seropositive compared to just over 2% thought to be seropositive in the general New York City population (Tynes et al., 1993). Other studies have found slightly higher results, with seropositive rates ranging from 7% to almost 10% (Tynes et al., 1993).

While there is no causal link between mental illness and HIV infection, behaviors known to be associated with certain psychological disorders may increase risk of infection. These include “hypersexuality, poor impulse control, self-destructive behavior, casual sexual relationships, lack of awareness of risks, impaired judgment, substance use, and potential for sexual victimization” (Tynes et al., 1993).

Hypersexuality is a behavior associated with manic episodes (periods of increased energy characterized by inflated self-esteem, grandiosity, reckless behavior, or sexual promiscuity) and the early stages of schizophrenia. The compulsive nature of hypersexual behavior makes it unlikely that protective measures during sexual encounters will be taken. Risk is compounded since many chronically mentally ill people have difficulty establishing and maintaining intimate relationships and therefore may have casual sexual encounters with multiple partners. One study of 60 chronically mentally ill patients in Wisconsin found that over 40% of the men and 19% of the women reported multiple sex partners in the previous year (Office of AIDS et al., n.d.). During all sexual encounters, the men reported using condoms on average 18% of the time and the women reported using condoms only 12% of the time. Moreover, 83% reported that in the past year they had encountered at least one of the following risky situations: exchanging sex for goods, having sex after using substances, or being pressured into unwanted sex.

Chronically mentally ill people may self-medicate or cope with their situations by using illicit substances. According to Tynes et al. (1993), “A recent review revealed that the

prevalence of substance use ranged from 20% to 75%, depending upon the patient sample.” Injection drug use has also been found among the chronically mentally ill at rates between 6% (Sacks et al., 1990) and almost 10% (Cournos et al., 1991).

Low levels of HIV/AIDS knowledge and low perceptions of risk among the chronically mentally ill also increase risk of HIV infection. One study cited in Tynes et al. (1993) found that a group of female psychiatric patients scored significantly lower on scales assessing HIV/AIDS knowledge than a nonpsychiatric medical control group. Additionally, 43% of the Wisconsin sample “believed that heterosexual women could not get AIDS, and 45% thought that a person with AIDS could be detected by his or her appearance (Office of AIDS et al., n.d.).” In a large study by Sacks and colleagues (1990), many mentally ill participants reported engaging in behaviors that place them at risk for HIV, but perceived their level of risk to be very low.

Depression

Depression is a broad term used to describe an emotional state that is characterized by a lack of energy, apathy towards oneself and others, and feelings of hopelessness and helplessness. Depression is caused by a variety of factors that may be either environmental, biological, or both. Depressive states can also be brief and easily overcome or chronic and difficult to alleviate. Adverse and unjust circumstances, such as poverty, homelessness, and discrimination, have a social component that contributes to depressive states. Since injection drug users, the gay community, and other groups considered to be at elevated risk for HIV infection experience many of these circumstances, they may be more likely to have depressive symptoms (Meinhardt et al., 1990).

Depression can be a barrier to motivation for behavior change and the acquisition of new skills. To illustrate, one study of urban Black women asserts that, “Depression may also be associated with reduced belief in ‘self-efficacy,’ which some suggest may reduce the likeliness of positive behavior change” (Orr et al., 1994). Episodic depression poses a particular barrier for HIV prevention. During depressive states, a person who has learned and practiced safe sex and drug use behaviors may relapse into unsafe behaviors. This may be a particular issue for gay men and others who have experienced multiple loss of friends and community acquaintances to the HIV/AIDS epidemic. Multiple loss may result in relapse into unsafe HIV risk behaviors, particularly since feelings of helplessness and hopelessness are common symptoms of depression resulting from these circumstances.

Several studies have found an association between depression and involvement in high risk behaviors among different groups. In their study of gay men, Perkins et al. (1993) found that increased levels of depression were associated with high risk (i.e., multiple partners and unprotected sex during receptive anal intercourse or unprotected anal sex with a known HIV-positive partner) and self-destructive behavior. Similarly, Nyamathi (1992) found that among a large sample of Black homeless women in Los Angeles, those who participated in high risk behaviors (primarily defined in this study as injection drug use) were more depressed than women not engaging in high risk behavior. Additionally, Latino men were found to use

condoms more frequently with secondary partners when they lacked depressive symptoms (Marin et al., 1993).

How Do Mental Health Stressors Increase HIV Risk?

Several behaviors and conditions associated with mental health stressors contribute to the risk for HIV infection among people contending with these issues:

- sexual compulsivity, including multiple casual partners, and low levels of condom use;
- non-injection substance use during sex and injection drug use in general;
- low levels of HIV/AIDS knowledge and low perceptions of risk; and
- potential relapse into unsafe practices.

Who Has These Mental Health Stressors?

There is no accurate picture of who has the varying mental health ailments described above. However, Exhibit 3.68 shows the distribution of people accessing all types of mental health services from brief counseling to long-term treatment in San Francisco by ethnicity, age, and sex. Overall, public mental health services are provided in San Francisco at twice the rate of the state average. For specific ethnic groups, San Francisco provides services at the following rates above the state average: 2.0 times for Whites, 1.8 times for African Americans, 2.6 times for Latinos, and 1.6 times for other ethnic groups (Meinhardt et al., 1990).

San Francisco leads the state in many diagnoses of chronic mental illness. The rate of major depression in San Francisco is the highest in the state at 561 cases per 10,000 people compared to the 447 per 10,000 state prevalence. The prevalence estimate of bipolar disorder (manic-depressive illness) in San Francisco is also the highest in the state at 114 per 10,000 (compared to the state's 72 per 10,000). Schizophrenia is similarly more prevalent in San Francisco than the state as a whole, at a rate of 108 (versus 96) per 10,000 (Meinhardt et al., 1990).

Exhibit 3.68	
Demographic Distribution of San Francisco Mental Health Service Clients	
Demographic characteristic	n=15,713
Age	
Under 19 years	21%
Adults 19-59 years	65%
Seniors over 60 years	14%
Gender	
Male	57%
Female	43%
Ethnicity	
African American	24%
Asian and Pacific Islander	18%
Hispanic	12%
Native American	1%
White	42%
Unknown/Other	3%

Source: Meinhardt et al., 1990

Self-Esteem

Self-esteem is one of the most popularly discussed aspect of people's psychosocial health and well-being. While this popularity has raised awareness about the psychological effects of self-perception on behavior, it has also diffused a common understanding of how self-esteem is best measured and the strength of its relationship to behavioral motivations. Self-esteem is used interchangeably with other terms such as self-regard, self-worth, self-acceptance and self-image (Muhlenkamp and Sayles, 1986) and generally refers to the value that a person places on him or herself (UCSF AIDS Health Project, 1995).

Researchers generally refer to two distinct types of self-esteem. *Basic* self-esteem is the foundation of esteem established during one's early life experiences in relationships with family members. *Functional* self-esteem is the basis of esteem that is formed later in life through an ongoing evaluation of relationships and social interactions (Muhlenkamp and Sayles, 1986). The latter is believed to be more powerful and amenable to change through intervention. Thus, self-esteem is an internal perception of oneself that is primarily externally determined. The external factors that largely determine self-esteem include: 1) security—a feeling of safety in

one's environment, 2) affiliation—a sense of belonging and acceptance in important relationships, 3) competence—the ability to achieve the things that one values and an awareness of one's strengths and weaknesses, 4) selfhood—a realistic assessment of one's attributes, and 5) mission—a sense of purpose and ability to influence one's own life circumstances (UCSF AIDS Health Project, 1995).

The relationship between self-esteem and health practices in general and HIV risk-taking in particular has been studied from various perspectives. This section focuses on the effect of low self-esteem on HIV risk-taking behavior.

What Is the Connection Between Low Self-Esteem and HIV Risk?

The link between self-esteem and HIV risk is an indirect one. Self-esteem is a contributing factor in the motivation behind certain behaviors, some of which increase risk for HIV infection. Therefore, there are no studies showing that low self-esteem increases the rate of HIV infection; rather, the influence of low self-esteem on participation in HIV risk behaviors has been considered.

Before discussing these studies, difficulties in the general study of self-esteem must be addressed. The fluctuations that occur in self-esteem based on a given context make it difficult to assess (UCSF AIDS Health Project, 1995). Additionally, there is often a high correlation between reported self-esteem and social support (a co-factor discussed in another section), which is unsurprising given the social determination of self-esteem (Muhlenkamp and Sayles, 1986). As a result, it is difficult to tease out the distinct effect of self-esteem apart from the effects of other closely related factors such as social support. Some studies considering the link between self-esteem and illness conclude that it is difficult to determine whether low self-esteem predisposes individuals to health problems or if the health problems cause the low levels of reported self-esteem (Antonucci and Jackson, 1983). Lastly, researchers often disclaim their studies of self-esteem and health because the reliability of survey instruments used to measure self-esteem may be questionable, as they appear to be highly susceptible to socially desirable responses (i.e., answering in ways thought to be desired by the researcher) (Muhlenkamp and Sayles, 1986).

Despite these limitations, studies have shown that self-esteem influences certain behaviors and health practices. In a small study of adults in the Southwest, low levels of self-esteem were found to be associated with poor nutrition, exercise, relaxation, safety, and health promotion and higher levels of substance use (Muhlenkamp and Sayles, 1986). These researchers also considered the effects of other factors such as age, education, gender, and social support on positive lifestyle. In comparison with these other factors, self-esteem accounted for approximately one-fifth of the variance in lifestyle reports.

In a large study of homeless women in Los Angeles, Nyamathi (1991) considered the effects of self-esteem, support availability, and coherence (i.e., a sense that one's circumstances are understandable and manageable) on involvement in high risk behaviors such as injection and

non-injection drug use, unprotected sex, and having a partner who uses injection drugs. She found that women who had lower self-esteem scores engaged in more high risk behaviors. However, self-esteem was not the only factor that contributed to this finding. Coherence and other practical factors such as addressing immediate survival needs were also significant. Overall, results of the data analysis showed that self-esteem accounted for less than 10% of the variance in high risk behaviors.

In a newsletter entitled, “Self-Esteem and HIV Risk-Taking,” the UCSF AIDS Health Project (1995) synthesized information on behavioral outcomes of low self-esteem. People with low self-esteem are more likely than those with higher self-esteem to use substances in order to temporarily feel better about themselves. Furthermore, people with low self-esteem are less able than those with higher levels of self-esteem to identify and communicate their needs to others. In sexual situations, this may mean that people with low self-esteem are not only less likely to assert themselves and insist that protection is used but also less likely to avoid risky behaviors in general.

Those who do not value their needs are also unlikely to value their health. This lack of self-concern may contribute to a minimized perception of the effects of HIV or an ambivalence about taking measures to avoid infection. Furthermore, people with more severely low levels of self-esteem may be chronically depressed and even suicidal. A study cited in the UCSF newsletter found that men who desired unprotected anal intercourse were depressed. Feelings of suicidality lead to self-destructive behaviors such as the desire to be physically and/or emotionally abused. Physical violence during sexual encounters can tear tissue and provide a more direct venue for viral transmission.

The partner of a person with low self-esteem may also be at increased risk for HIV infection. Low self-esteem not only contributes to ambivalence about one’s own health, but also may mute concern for others. A lack of concern for the health and well-being of one’s partner is known to be associated with infrequent condom use (UCSF AIDS Health Project, 1995).

The link between self-esteem and health appears to be stronger among women generally than for men. For example, a study by Herold, Goodwin, and Lero (cited in Muhlenkamp and Sayles, 1986) found that women who had higher levels of self-esteem “had more positive attitudes about birth control and were more apt to obtain and use contraception effectively.” When Antonucci and Jackson (1983) looked at gender differences in the relationship between ill health and self-esteem, they found that “the relationship between health and self-esteem was clearly stronger for women.” On the other hand, a study of hypertensive males by Andreoli (cited in Muhlenkamp and Sayles, 1986) found no significant difference in self-concept between those “who complied with prescribed therapy and those who did not.”

Alternative sources suggest that self-esteem is a necessary component for motivation to change HIV risk behavior, particularly among disenfranchised groups. During the planning phase of a community-based HIV prevention intervention in San Francisco, qualitative interviews were conducted with injection drug users, poly-substance users, transgender people, gay and bisexual men, and others at elevated risk for HIV infection. Across groups, these

informants had high levels of knowledge regarding HIV/AIDS prevention. When probed regarding the barriers to enacting this knowledge, informants overwhelmingly replied that feelings of low self-worth and hopelessness made HIV preventive behaviors in particular and taking care of oneself in general unlikely. Overall, this study found that valuing oneself is a crucial determinant of whether disenfranchised people will seek and utilize available services and incorporate HIV protective behaviors into their routines (Flournoy, 1996).

How Does Low Self-Esteem Increase HIV Risk?

Self-esteem increases HIV risk by motivating health-related behaviors. Particularly, low self-esteem is often associated with the following behaviors that can increase the risk of HIV infection:

- injection substance use;
- non-injection substance use during sex;
- other self-destructive behaviors such as involvement in abusive relationships and a desire for unprotected sex;
- ambivalence about one's own and potentially other's health in general; and
- valuing other's needs over one's own.

Who Has Low Self-Esteem?

People of all ages, socioeconomic classes, and cultures may exhibit low levels of self-esteem (UCSF AIDS Health Project, 1995). Nonetheless, certain groups and communities may be more likely to have lower levels of self-esteem than others. For example, several sources warn that young people are more susceptible to self-esteem issues than other age groups (UCSF AIDS Health Project, 1995; Walter and Vaughan, 1993; Health Initiatives for Youth, 1995). This is partly explained by the developmentally appropriate process of individuation in which young people begin to establish their own beliefs and values independent of authority figures. Many young people feel overwhelmed during this process and experience periods of self-doubt that problematize decision-making and negotiating desires.

Because self-esteem is an internal response to external reflections and attitudes, social and environmental factors play a key role in determining levels of esteem for special populations. For example, discrimination and socioeconomic imbalances can contribute to low self-esteem among disenfranchised communities, including communities of color, the gay/lesbian/bisexual community, the transgender community, those who are differently abled, and homeless and impoverished people (UCSF AIDS Health Project, 1995).

Members of the transgender community who participated in focus groups as part of the California HIV prevention planning process stressed that low self-esteem is pervasive in their community (Comprehensive Planning Working Group, Office of AIDS, 1995). Societal messages condemning the transgender community make it difficult for its members to establish and maintain a positive sense of self. This fuels a negative cycle in which many transgender people seek to anesthetize the pain of rejection through substance use.

According to Antonucci and Jackson (1983), people with health problems are likely to have lower levels of self-esteem. Furthermore, they found in their study that as the severity of the health problem increases, levels of self-esteem decrease. The most extreme example they provide is disability: the disabled are most likely of groups with health problems to have low self-esteem.

This society places strong value on formal education and English literacy. Therefore, many people who lack formal education and people for whom English is not their primary language, low self-esteem may be a problem. This dynamic often perpetuates rather than alleviates difficult circumstances for people who lack formal education and English literacy (UCSF AIDS Health Project, 1995).

Other life experiences appear to have a direct influence on self-esteem. Psychologically and physically traumatic experiences in particular contribute to low levels of self-esteem. For example, studies of child abuse survivors consistently show that the experience of abuse damages the esteem of the person surviving it (Allers et al., 1993).

BEHAVIORAL CO-FACTORS

The behavioral co-factors include substance use/abuse, commercial sex work, and involvement with multiple sexual partners and risky partners.

Substance Use/Abuse

This section examines non-injection use of psychoactive substances (e.g., alcohol, cocaine, speed, ecstasy, poppers, crack, and crystal) that may inhibit a person's ability to make healthful judgments about sexual behavior or further drug use. Because injection drug use is an HIV risk factor (i.e., a direct means of transmission), it is not discussed in this section. Due to the pervasive use of alcohol and the abundance of literature available on the relationship between stimulants (e.g., amphetamines, powder cocaine, crack cocaine, and poppers) and HIV risk, these substances are highlighted.

What Is the Connection Between Substance Use/Abuse and HIV Risk?

Almost all studies of HIV infection associate recreational, psychoactive drug use among homosexual men with HIV-related illness or infection. However, the nature of this association has been controversial. Some studies show that there is a strong link between recreational drug use and HIV-transmitting sexual behaviors (Stall et al., 1986; Seage et al., 1992; Kelly et al., 1992; Woody et al., 1996). Others have failed to find an association between recreational drug use and HIV seroprevalence (McCusker et al., 1990; Moss et al., 1987). This lack of association may be due to the focus of each study. For example, in a 1993 North Carolina study of gay men, no relationship was found between a history of substance use and high-risk sexual activity (Perkins et al., 1993). However, Perkins and colleagues believed that the lack of a relationship between substance use and high-risk sexual activity was due to their measuring history of substance use rather than looking at substance use during sex.

Many studies published after 1990 raised this point: the association between risk and the general use of drugs is weaker than the association between risk and the use of drugs during sex. In Calzavara et al. (1993) and McCusker et al. (1992), gay men who used recreational drugs in conjunction with sexual activities were found to be at higher risk. However, Calzavara et al. (1993) found that those who used recreational drugs not in conjunction with sexual activity had risk scores that were not statistically different from those who did not use drugs at all.

The association between higher-risk sexual activity and recreational drug use is not an issue specific to the homosexual and bisexual communities. It has also been documented among heterosexual men and women and adolescents (Calzavara et al., 1993). For adolescents, common use of illicit substances, especially alcohol and marijuana, is associated with high-risk sexual behaviors. These behaviors include a younger age of sexual debut, inconsistent use of condoms or failure to use them, and sexual intercourse with multiple partners (Shafer et al., 1993). Among HIV-negative heterosexual men, a National Institutes of Health study found an association of combined sexual activity and drug use with a lack of condom use. Among HIV-negative women, regular drinking and combining sex and drugs were associated with not using

condoms. However, no statistically significant association was found between alcohol/drug use and condom use among HIV-positive women (Kennedy et al., 1993).

What Is the Connection Between Stimulants and HIV Risk?

Stimulants include illicit amphetamines such as cocaine and speed (or “crystal”, “meth”, “crank”, “ice”) and legal amphetamines such as nicotine and caffeine, although this discussion focuses on illicit stimulant use. Stimulants are used for a variety of reasons, including to elevate mood, to increase alertness and energy, and to suppress appetite. Specific effects of speed use also include increased sexual stamina and resistance to becoming alcohol-intoxicated. Speed and cocaine, the two stimulants discussed in detail here, can be either injected or snorted; moreover, of injectable drugs, speed is one of the most commonly injected.

Speed is produced locally in the Bay Area, providing easy access at relatively low unit price. Speed use has become increasingly popular among many population groups, but appears particularly common among gay men in San Francisco (relative to other cities). In the Vaccine Preparedness Study, baseline data on over 3,000 gay men in six cities indicate that amphetamine use was highest in San Francisco (23% reporting current use) compared to other study sites such as Seattle (10%) and New York (5%) (Woody et al., 1996).

Speed use is frequently combined with sex and is statistically associated with unsafe sexual behaviors. In a study comparing a group of gay men in substance abuse treatment with the group of gay men not in treatment who were recruited for the San Francisco Men’s Health Study (SFMHS), Paul et al. (1993) found that for both groups speed was the drug most often combined with sex and that the risk of unprotected anal sex was higher for those who reported speed use. Specifically, in the SFMHS cohort, “The relative risk of having engaged in unprotected receptive anal intercourse was almost three times higher for those reporting amphetamine use (as compared with those who did not use)” (Paul et al., 1993). Another large study of men who have sex with men, the Vaccine Preparedness Study (VPS), also found an association between stimulant use (amphetamines and cocaine analyzed together) and a greater chance of having risky sex (Woody et al., 1996). Furthermore, in a prospective cohort study of over 600 gay/bisexual men in Sydney, Australia, HIV-negative men who seroconverted over the course of the three-year study period were significantly more likely to have used amphetamines compared to those who remained HIV-negative (Burcham et al., 1989).

Studies report similar findings of an association between cocaine use and involvement in risky sexual behaviors. Of 131 self-identified gay/bisexual men accessing substance abuse treatment services at a San Francisco agency, those who most consistently had unprotected anal sex while under the influence of alcohol and other drugs were also more likely to use cocaine (Crosby et al., 1996).

In a large National Institutes on Drug Abuse (NIDA) funded study of heroin addicts on methadone maintenance, Grella et al. (1995) considered differences between those who also used cocaine and those who did not. They conclude from their analyses that those clients on methadone maintenance who also used cocaine were at higher risk for HIV infection because of

their sexual behaviors: they were more likely to engage in commercial sex work for money or drugs and they were less likely to report condom use during any sexual encounter (Grella et al., 1995; see also Compton et al., 1995 for a meta-analysis of findings).

What Is the Connection Between Crack and HIV Risk?

Crack cocaine, a smokable and highly addictive form of cocaine, gained widespread use in many urban areas in the U.S. in the mid-1980s. Unlike powder cocaine, crack may be obtained for a very low unit price and it has become widely used by young persons in many poor and minority communities (Edlin et al., 1992).

There is evidence that the use of crack cocaine increases the likelihood of being HIV-positive. For example, in a recent study of prenatal patients, 26% of crack users were HIV-positive, while only 2% of non-crack users tested positive for HIV (McKeganey, 1994).

A large study of 18-to-29 year olds in three cities (San Francisco, New York City, and Miami) examined differences in high-risk behaviors among injection drug users who smoke crack, injection drug users who do not smoke crack, non-injection drug users who smoke crack, and those who neither inject drugs nor smoke crack. Researchers found that crack smokers were at higher risk for HIV than were injection drug users. The highest risk group included those who smoked crack and did not inject drugs, followed by injection drug users (which included crack smokers and non-crack smokers). Both men and women who smoked crack but did not inject drugs reported having more sex partners than non-crack smokers (Edlin et al., 1992).

A 1993 study of Black San Francisco and Oakland teenagers found that crack users were at higher risk than nonusers. Overall, an index of risk held about the same mean score for boys and girls, but the nature of the risks were very different (Fullilove et al., 1990a). Teenage girls who used crack were less likely to have used a condom during last sexual intercourse and were approximately three times more likely to report having had sex under the influence of drugs or alcohol than were their nonusing counterparts. One in four crack using girls exchanged sex for money or drugs. Crack using boys had a significantly higher mean number of sexual partners in the previous 12 months than did non-using boys. They were almost four times more likely than nonusers to report having had sex under the influence of drugs or alcohol. However, crack using boys were just as likely to use condoms in their most recent sexual intercourse as were nonusing boys (Fullilove et al., 1993).

Fullilove et al. (1990a) also found that adolescent female crack users were more likely to have a history of STDs than were crack using boys. Almost half of the adolescents combined crack and sex, and of these youth, over half reported they had had at least one STD. However, of the teenagers who combined sex with crack, girls were far more likely to have an STD history (81% of girls, versus 39% of boys) (Fullilove et al., 1990b). The highest prevalence of an STD history was among young women who reported having sold crack as well as having combined crack use with sexual relations: 92% of these young women had a history of STDs, compared to 29% of those who had not sold crack or combined it with sex (Fullilove et al., 1990b).

Ethnographic research conducted by Inciardi (1995) among 52 crack users (17 men and 35 women) who also exchange sex for crack (or money to buy crack) in Miami provides a rich context for the influences that the culture of crack use have in increased risk for HIV infection. First, Inciardi found that these crack users involved in commercial sex work had extremely high numbers of sexual partners: 5 of the men and 31 of the women had over 100 partners in the past 30 days. Condom use was also low: “only 23% of the women always insisted that their partners use condoms during vaginal sex”. Similarly, “only 18% of the men always used condoms during vaginal sex, only 12% used condoms during oral sex, and only 29% always used condoms during anal sex.” Additionally, Inciardi mentions effects of crack use on sexual activity that are likely to heighten infectivity or susceptibility to HIV infection: 1) crack use tends to inhibit ejaculation, contributing to the length of time and thus skin abrasion that occurs during sex acts, 2) risk of infection during oral sex is high among this population because sores on and around the mouth are common, and 3) heavy crack users’ immune systems are often impaired in general because of lack of sleep, nutrition, and basic hygiene.

Interestingly, Inciardi also asserts that differences between street-based commercial sex workers who work for money (and not to support a crack habit) and those who primarily exchange sex for crack or money specifically to buy crack indicate that the latter are at relatively higher risk for HIV infection. He highlights that exchangers of sex for crack have higher number of sexual partners, use condoms less frequently, are less concerned for and have lower awareness of STDs in general, and use less discretion in choosing customers in general (Inciardi, 1995).

While Inciardi’s study specifically pursued crack users who also exchange sex for crack, other studies considered the prevalence of commercial sex work among crack users in general. Consistently, these studies found that high proportions of crack users also engage in commercial sex work. Schumacher (1996) found that of 23 African American crack-using women in residential treatment, 87% had traded sex for crack. Schumacher et al. (1996) report that of 75 primarily male crack users in residential treatment, 70% had traded sex for crack. Kral et al. (1996) found that among 231 women who have sex with women and either inject drugs (21%), inject drugs and smoke crack (31%) or smoke crack but do not inject drugs (49%), 62% had a history of commercial sex work.

In their sample of women who have sex with women described above, Kral et al. (1996) also found infrequent condom use during sex. Sixteen (7%) of these women used barrier protection during oral sex with women in the past 30 days. Furthermore, 110 women (50%) also had sex with men in the past 30 days; of these, only 30% reported always using condoms during vaginal sex. Lastly, of the 23 women who had anal sex with men in the previous 30 days, only 26% reported always using condoms.

However, Edlin et al.’s (1996) large study of crack users 18 to 29 years old in San Francisco, New York City, and Miami (preliminary data for which are discussed above) highlights important differences for those recruited in San Francisco compared to the other two cities. HIV prevalence and incidence rates were considerably lower among young crack users in San Francisco (2 % and 0% per year respectively) compared to New York City (19% and 6%

per year) and Miami (17% and 4% per year). They conclude that the rates they found parallel the rates for injection drug users in the respective cities. Also, they found that “female crack smokers were less likely to have had sex in exchange for money or drugs in San Francisco (56%) than in New York City (72%) or Miami (78%) and those who did were less likely to have done so without using a condom (San Francisco, 29%; New York City, 50%; Miami, 44%, $p=.02$) and had fewer paying partners (median, San Francisco, 20; New York City, 65; Miami, 65, $p<.001$)” (Edlin et al., 1996). Among male crack smokers, those in San Francisco (8%) were less likely than those in New York City (18%) and Miami (28%) to have had anal sex with men ($p<.001$).

What Is the Connection Between Alcohol and HIV Risk?

The connection between alcohol and HIV risk is much weaker than the connection between crack or poppers and HIV risk. According to Avins et al. (1994), “Among researchers, there is no clear consensus on whether alcohol use potentially increases rates of high-risk sexual activity.” However, several studies have found a link between alcohol and increased rates of infection (Scheidt and Windle, 1995) or risk activities. A 1993 Toronto study of gay men found that alcohol and marijuana were strong predictors of high-risk sexual activity (Calzavara et al., 1993). Also, baseline substance use and sexual behavioral data on over 3,000 men who have sex with men from some of the Vaccine Preparedness Study (VPS) sites (Boston, New York City, Chicago, Denver, Seattle, and San Francisco) indicate that heavy use of alcohol was associated with a greater chance of having risky sex (Woody et al., 1996).

The AIDS in Multi-Ethnic Neighborhoods study in San Francisco found that heterosexual men and women undergoing alcohol treatment had a much higher prevalence of HIV infection (3% and 4%, respectively) than did comparable men and women in these communities (0.5% and 0.2%, respectively). Additionally, the rates of high-risk behaviors were several times higher among these alcohol-dependent clients than among the comparable general population respondents. Scheidt and Windle (1995) report similar findings from their New York City Alcoholics in Treatment HIV Risk (ATRISK) Study. Stall and McKusick reported that the combination of alcohol and drug use was a predictor of reported unprotected sexual intercourse among male and female heterosexuals in an exit survey of heterosexual pick-up bar patrons in San Francisco (cited in Ostrow et al., 1990).

On the other hand, several studies have found no association between alcohol use (general alcohol use and alcohol use during sex) and high-risk behavior or HIV infection (Paul et al., 1994; Avins et al., 1994; van Griensven et al., 1987; Ostrow et al., 1994; Davidson et al., 1992). The Chicago MACS study found no link, except that heavy users (60+ drinks/month) at their first interview reported higher frequency of unprotected receptive anal intercourse than did nonusers or moderate users. This association was not observed at any subsequent period (Ostrow et al., 1994). The Pittsburgh MACS study found that alcohol bore little relation to unprotected receptive sexual practices once other psychosocial variables (such as social support and depression) were controlled. Alcohol was only associated with riskier insertive behavior, which can place the partner at risk (Davidson et al., 1992). According to Avins et al. (1994), “These disparities may stem from differences in subject selection, measurement of variables and

definitions of high risk behaviors. An alternative explanation for the elevated seroprevalence is that alcohol abuse may be a marker for individuals who tend to have risk-taking personalities rather than a direct cause of high-risk behavior. In these individuals, alcohol abuse and high-risk sex may both be manifestations of a general behavior pattern.”

Recognizing these disparities, Woods and colleagues (in press) considered survey data from a sample of 743 “clients entering public alcohol treatment centers in the San Francisco Bay Area.” Since they attribute the disparities in the literature to inconsistencies in measurement of alcohol use, they used several scales and multiple statistical tests of significance to increase the robustness of their findings. Their findings confirm previous reports that the relationship between alcohol use and involvement in risky behavior is complex. Specifically, they found that the mere use of alcohol does not predict high-risk behavior, but rather the use of alcohol during sex predicts high-risk behavior. Furthermore, although alcohol use during sex was “routinely associated with risk-taking behaviors,” alcohol and substance use did not “diminish respondent’s ability to practice risk-reducing interventions” (Woods et al., in press).

Among adolescents, there are indications that alcohol use is linked to HIV risk. Adolescents in a San Francisco detention facility who used alcohol before sexual activity stated that they were less likely to use condoms (Shafer et al., 1993). Furthermore, there was a strong association between alcohol use and STDs: those who drank daily were 3.5 times more likely to have or have had an STD compared to those who abstained from alcohol. Among Black and multi-ethnic youth, heavy drinkers were almost twice as likely to have had an STD; among Hispanic and White youths, heavy drinkers were 4.74 times as likely to have had an STD when compared to those who abstain (Shafer et al., 1993). Data from the San Francisco Young Men’s Study presented at the APHA meeting (1993) indicate that young gay and bisexual men who were high on alcohol during sex were somewhat more likely to report practicing unprotected anal sex (39% compared to 28%).

What Is the Connection Between Poppers and HIV Risk?

The alkyl nitrites (amyl, butyl, iso-propyl) are colorless or yellow liquids at room temperature and are highly volatile. They have a fruity odor (often described as unpleasant) and have been nicknamed “poppers” because of the sound made when glass capsules containing amyl nitrite are crushed (Haverkos et al., 1994). Inhalation of nitrites relaxes smooth muscle, causing intense flushing, a fall in blood pressure, and an increase in heart rate, accompanied by feelings of warmth, rapid pulse, and throbbing sensations. It may produce a euphoric effect and/or a headache (Haverkos and Dougherty, 1988).

Nitrite can be obtained as a prescription drug (amyl nitrite) used to treat cardiovascular disease, as liquid incense (in labeled bottles sold as room odorizers), and in unlabeled bottles which usually contain a combination of amyl, butyl, and isobutyl nitrite (Seage et al., 1992). In response to the chronic adverse effects of inhaling nitrites, Congress enacted a ban on the manufacture and retail sale in 1988. After that, isopropyl nitrite was marketed as a room odorizer until 1990 when Congress outlawed the manufacture and sale of all alkyl nitrites. Since then, at least one manufacturer has developed a cyclohexyl nitrite inhalant which is not

technically banned. Underground manufacturers and importers continue to market butyl and isopropyl nitrites illegally (Haverkos et al., 1994).

In study after study, the use of poppers has been strongly implicated in HIV risk among gay men (de Wit, 1994): no studies of poppers' connection to HIV risk among other populations were found. In the 1993 study of Toronto gay men, poppers used in conjunction with sex was the strongest predictor of high-risk activity (Calzavara et al., 1993). Other studies mirrored this finding (Fisher, 1992; McKirnan, 1993). For example, in the Vaccine Preparedness Study (VPS) mentioned above, Woody et al. (1996) found, "heavy use of poppers was most strongly [compared to use of other substances] associated with risky sex (OR: 2.2)."

Paul et al. (1994), in a study of people in treatment, found that combining poppers with sex was more frequent among those who reported unprotected anal sex with non-primary partners. The Pittsburgh MACS study found that the association between popper use and risky receptive intercourse was significant even after other psychosocial variables (e.g., social support and depression) were controlled. Young men in the study showed an even stronger relationship between popper use and risk behavior than did older men (Davidson et al., 1992). In the Chicago MACS study, men reporting popper use consistently participated in more high-risk sexual activities than did sexually active men not reporting popper use (Ostrow et al., 1994). Data from the San Francisco Young Men's Study indicate that young gay and bisexual men who were high on poppers during sex were much more likely to report practicing unprotected anal sex—60% compared to 32% (Lemp, 1994). Similarly, in the Crosby et al. (1996) study of San Francisco gay/bisexual men in substance abuse treatment, those who most consistently had unprotected anal sex while under the influence of other alcohol and drugs were also more likely to use poppers (Crosby et al., 1996).

Poppers are also implicated in HIV infection. Among all variables tested, Penkower et al. (1990) found that nitrite inhalant use was the most strongly associated with HIV seropositivity among a cohort of 1045 gay men. The Chicago MACS study found an association between the use of poppers and seroconversion (Ostrow et al., 1995). In a New England study of gay men, those who always used nitrites while engaging in unprotected receptive anal intercourse were 4.2 times more likely to be HIV-infected than men who had engaged in unprotected receptive anal intercourse but never used nitrites. Those who sometimes used nitrites when engaging in unprotected anal receptive intercourse were 11 times more likely to be HIV-infected compared to those who never engaged in unprotected receptive anal intercourse nor used nitrites. Even when the researchers controlled for the number of unprotected receptive anal sex partners of unknown HIV status and history of gonorrhea or syphilis, the odds ratio decreased only slightly, indicating that popper use was the more significant risk factor (Seage et al., 1992).

Exner et al. (1992) considered the correlation between the use of various substances and gay men's self-perceptions of control over their sexual behaviors. These investigators found the strongest correlation between use of poppers and decreased perception of control over sexual behavior in general. This finding implies that gay men who use poppers feel less able to exert

control over their sexual drives and involvement in risk behaviors, contributing to the likelihood of unsafe sex (Exner et al., 1992).

How Does Substance Use/Abuse Increase HIV Risk?

The literature presents several possible explanations of how substance use/abuse works to increase HIV risk. These explanations are outlined below:

- Drug and alcohol use may be a marker for a style of risk taking, and as such may be a marker for high-risk sexual encounters (Ostrow et al., 1994; Avins et al., 1994; O'Campo et al., 1992).
- Substance users may be a subgroup of persons whose sexual partners are more frequently HIV-positive, so that a given behavior is more likely to produce seroconversion (Ostrow et al., 1994).
- The use of drugs may result in high-risk behavior because it decreases inhibitions and discrimination, particularly during sexual arousal, which in itself is a form of disinhibition (Calzavara et al., 1993; Kennedy et al., 1993).
- Alcohol and drugs may alter risk perception and have a distorting influence on the decision-making process of whether or not to use condoms (Kennedy et al., 1993).
- Use of alcohol or drugs may make the proper use of condoms less likely (Ostrow et al., 1995).
- Drugs and alcohol can alter immune functioning, so that exposure is more likely to produce infection (Ostrow et al., 1994; Avins et al., 1994).
- Crack appears to have an influence on the number of sexual partners and trading sex for money or drugs (Edlin, et al., 1992).
- Poppers dilate blood vessels and relax the sphincter to make it easier to accept a partner's penis (Seage et al., 1992). Use of poppers may increase tolerance to rectal abrasions (Moss, 1987). Pain cues which would usually lead to adjustment or termination of the contact are neglected by those on poppers and the intercourse is prolonged (van Griensven, et al., 1987).
- A biologic explanation might posit that popper or cocaine use either causes transient immune suppression that increases the likelihood of infection during a particular exposure, or makes it easier for infected semen to cross the rectal mucosa and enter the bloodstream of the receptive partner. Acute immunosuppressive effects of both poppers and cocaine have been reported recently in support of these possible mechanisms (Ostrow et al., 1995).

Who Uses Substances?

Ethnicity

The only study found that describes substance use/abuse by ethnicity is specific to alcohol use. Caetano and Hines (1995) analyzed data collected in 1991 and 1992 as part of the general population National Alcohol Survey. Their various findings refer to differences by ethnicity in rates of alcohol use and ethnic differences in associations between alcohol use and

unsafe sexual behaviors among Whites, Hispanics, and Blacks. First, they found that a “greater percentage of Hispanic men [22%] than White [15%] and Black [14%] men reported drinking five or more drinks...monthly.” Regarding alcohol consumption and HIV risk, they found that, “a higher percentage of Black respondents in the heavy drinking category reported engaging in risky sexual behaviors [being nonmonogamous or being with a nonmonogamous partner] than did respondents in the other two ethnic groups” (Caetano and Hines, 1995).

Several indicators of substance use by ethnicity were also found. Exhibit 3.69 shows the percentage by ethnicity of instances of emergency room drug episodes, Community Substance Abuse Services (CSAS) Treatment clients, and San Francisco population.

Exhibit 3.69
Distribution of Ethnicity among SF Emergency Room Drug Episodes, CSAS Treatment Clients, and General Population, 1993-94

	SF ER Drug Episodes	CSAS Treatment Clients	SF Population
	n=8,900	n=14,698	n=731,876
African American	30%	40%	11%
Asian/ 'Other'	4%	7%	30%
Latino	14%	10%	15%
White	52%	43%	45%

Source: Abramowitz AG and Patt F. “San Francisco Substance Abuse Indicator Data: Volume 2, Key Indicator Charts and Tables”. Compiled and distributed by the Epidemiology Unit, Community Substance Abuse Services, Department of Public Health, January 1995.

Furthermore, the AIDS in Multi-Ethnic Neighborhood (AMEN) Study of 20 to 44 year olds in specific San Francisco neighborhoods provides information about substance use in three areas, shown in Exhibit 3.70.

Exhibit 3.70
Substance Use in Past 12 months from the San Francisco AMEN* Study, 1988-89.

Substance**	Neighborhood			
	Western Addition (n=566) %	Bay View (n=298) %	Mission (n=906) %	Total (n=1770) %
Alcohol				
Heavy use	23	12	23	21
Marijuana				
Monthly or more	33	24	24	27
Cocaine				
Monthly or more	7	14	8	9
Crack				
Monthly or more	4	13	2	4
Amphetamines				
Monthly or more	3	1	3	3
Barbiturates				
Monthly or more	1	3	2	2
Heroin/opiates				
Monthly or more	1	2	2	2
LSD/PCP/psychedelics				
Any use	13	3	10	10
MDA/Ecstasy/etc.				
Any use	10	2	6	7

**Substance use in the last 12 months.

* The AIDS in Multi-Ethnic Neighborhood (AMEN) Study was conducted by UCSF with unmarried 20-44 year olds in specific San Francisco neighborhoods.

Source: Abramowitz AG and Patt F. "San Francisco Substance Abuse Indicator Data: Volume 2, Key Indicator Charts and Tables". Compiled and distributed by the Epidemiology Unit, Community Substance Abuse Services, Department of Public Health, January 1995.

Crack cocaine is a drug used more often by African Americans than other groups. For example, in a large four-city study, over 85% of crack users were Black and 11% were Hispanic. Slightly more than half were males (Edlin et al., 1992).

Gay, lesbian, bisexual, transgender communities

Lesbian, gay, and bisexual women and men appear to use alcohol and other drugs more often, in greater amounts and in combination more frequently than the general population. According to the “San Francisco Lesbian, Gay and Bisexual Substance Abuse Needs Assessment,” 31% of all gay/bisexual men and 18% of all lesbian/bisexual women reported using substances at the highest level and 11% of men and 13% of women reported using substances at the moderate level. Thus, a total of 34% of the women and 42% of the men may be using at significant levels (San Francisco Substance Abuse Indicator Data, 1995).

The Needs Assessment reported that, for men, the most commonly used drugs were alcohol (75%), marijuana (50%), amyl nitrite (27%), pain killers (26%), amphetamines (18%), and cocaine (17%). Except for alcohol, these rates are significantly higher than for men in the general population. Only 28% had been in recovery for alcohol or drug use (San Francisco Substance Abuse Indicator Data). In the Chicago MACS study of gay and bisexual men, the proportion of men using each category of recreational drug (marijuana, cocaine, poppers, et cetera) decreased by at least 50% between 1984 and 1988, and the proportion of men abstaining from any recreational drug usage increased from none at baseline to one-third of the cohort at the end of the study period (1990). Nevertheless, approximately half of the cohort continued to use one or two recreational drugs other than poppers, and more than 40% reported the use of poppers during the most recent assessments (Ostrow et al., 1994). Nitrite usage among gay men dropped after the connection to Kaposi’s Sarcoma was promoted; one study indicated that it dropped from 66% in 1984 to 35% in 1989.

According to the 1995 San Francisco Substance Abuse Indicator Data, lesbian and bisexual women most commonly used alcohol (66%), marijuana (38%), pain killers (29%), tranquilizers (16%), and cocaine (14%). Except for alcohol, these rates are significantly higher than for women in the general population. Only 26% had been in recovery for alcohol or drug use. However, data from a large community-based health survey of lesbian and bisexual women conducted by the San Francisco Department of Public Health AIDS Office in 1993 indicate that 82% of their sample used alcohol at least a few times per year and that more than 40% drank alcohol 1 to 3 times per week. Regarding other substance use, these women reported using marijuana (67%), MDA/ecstasy (23%), LSD/psychedelics (22%), cocaine (21%), downers such as Valium (14%), and uppers such as speed or crystal methamphetamine (14%). Injection drug use in the past three years was very low, reported by only 2% of the sample.

Among transgender persons, no data were reported in the Substance Abuse Indicator Data. Service providers working with transgender communities report that the substance use/abuse in these communities tends to be heroin, in addition to injecting hormones. Among male prostitutes (most of whom were transgender MTF) participating in a New Orleans study, 68% were high on at least one substance while working, and 57% reported using drugs or alcohol with their clients.

Women

In San Francisco, women are more likely to be served through detox or methadone maintenance than in residential treatment facilities. Of those served by CSAS, the distribution of primary drug used was: 49% heroin, 23% crack cocaine, 21% alcohol, 2% other cocaine, 1% methamphetamine, 1% marijuana, and 3% other drugs. Women comprised 29% of alcohol and drug treatment episodes for FY 91/92. Of these women, 47% were White, 42% were African American, 7% Latina, 2% Asian/Pacific Islander, and 2% Native American (San Francisco Substance Abuse Indicator Data, 1995).

Adolescents

Alcohol is the number one substance problem for San Francisco youth, according to San Francisco Unified School District reports. Of students surveyed, 59% of high school students and 39% of middle school students had ever drunk alcohol. Cocaine use for this sample was 6% for high school students and 2% for middle school students. Nine percent of high school students had ever tried other drugs, such as LSD and PCP.

A 1991 U.S. Public Health Survey reports that San Francisco homeless and runaway youth use substances at rates much higher than the general U.S. adolescent population. Within the prior two months, 31% used marijuana (versus 23% nationwide); 10% (versus 2% nationwide) used LSD; 9% (versus 5% nationwide) used speed and 2% (versus 0.2% nationwide) used heroin. Cocaine use was similar among homeless and general adolescent populations: 9%. However, in a sample of 1,796 street youth from three cities (San Francisco, New York City, and Los Angeles) surveyed as part of the national AIDS Evaluation of Street Outreach Projects (AESOP), much higher rates of substance use were found (Anderson et al., 1996). Between 74% (Los Angeles) and 81% (San Francisco) drink alcohol at least occasionally, 70% (New York) to 91% (San Francisco) smoke marijuana, 10% (San Francisco) to 15% (New York) used crack in the past month, and 11% (Los Angeles) to 15% (San Francisco) injected drugs in the past month. Additionally, 29% (Los Angeles) to 41% (San Francisco) had ever been in drug treatment (Anderson et al., 1996).

Commercial Sex Work

Commercial sex work is the exchange of sex for money, drugs, a place to stay, or any other perceived benefit. Sociocultural taboos and legal restrictions contribute to a clandestine aspect of commercial sex work that often necessitates isolated and secretive conditions for workers. Commercial sex workers may be street-based or “off-street,” i.e., based out of a home, apartment, hotel, massage parlor, or some other dwelling. Pornography and phone sex services are also considered part of the sex industry. While the majority of sex workers are women, men and transgender people are also known to be involved. This section discusses the link between commercial sex work and HIV risk in general. Differences in risk between street-based and off-street sex workers are highlighted.

What Is the Connection Between Commercial Sex Work and HIV Risk?

There is substantial concern for the degree of risk that commercial sex workers face for HIV infection through sexual transmission, because sexual acts are the defining behaviors of their trade. High rates of HIV infection have been reported for populations of commercial sex workers in many places around the world (Boles and Elifson, 1994). Alegria et al. (1994) reported that 32% of their sample of mixed street-based and off-street sex workers in Puerto Rico tested HIV-positive. In a Baltimore study, Astemborski et al. (1994) found high HIV seroprevalence rates among sex workers who also inject drugs (28%), and that the rate was twice as high among these sex workers who had more than 50 paying partners than for those who had fewer than 50 paying partners. An 8% HIV infection rate among women sex workers in San Francisco was reported by Dorfman et al. (1992).

The high rates of sexually transmitted diseases (STDs) found among sex industry workers increase risk for HIV. McKeganey (1994) cites a large Los Angeles study of street prostitutes in which 47% reported at least one STD in the past 6 months and 34% showed signs of past or current syphilis. STD rates among sex workers who also use drugs appear to be even higher. Furthermore, STD rates were higher (81%) among those workers who had more than 50 paying customers (Astemborski, 1994). Among the women in the San Francisco study, syphilis infection was highest (23%) among those who also used crack (Dorfman et al., 1992).

Behaviors common among sex industry workers increase their risk for HIV infection. Frequency of involvement in these behaviors and the influence of these behaviors on HIV risk may be different for street-based and off-street workers and for those who engage in sex work as their primary source of income versus those who exchange sex for goods intermittently. The prostitute advocacy group Coyote, the San Francisco Bay Area California Prostitute Education Program (Cal-PEP), and available research suggest that the risk for HIV that street-based sex workers face is higher than the risk for those working in off-street situations (California HIV Prevention Plan, 1995; Lockett, 1995; McKeganey, 1994).

Providers report that risk is higher among immigrant Asian women who sell sex in massage parlors than for those working in other off-street sites for several reasons. Many of these women are required to provide risky services while held under the threat of deportation by their “manager,” who is also usually their legal sponsor (California HIV Prevention Plan, 1995; Lockett, 1995; Wilkinson, 1995). Additionally, the security that many women working in a massage parlor perceive (compared to street-based sex work) may mask other hazards: Asian/Pacific Islander women working in massage parlors are isolated from other opportunities to transition out of sex work and may be “more isolated from the information-sharing and outreach efforts available on the street” (Wilkinson, 1995).

Injection drug use appears to be more prevalent among sex workers than for those who do not trade sex. The relationship between injection drug use and commercial sex work is a complicated one because it is not always clear which behavior motivates the other, or whether any cause-effect relationship exists at all. In other words, while many commercial sex workers

may inject drugs to more easily tolerate their circumstances, many injection drug users may engage in commercial sex work to get the drugs they use (Onorato et al., 1995).

Condom use is another important determinant of HIV risk for commercial sex workers. While the general population of sexually active people typically have only casual and/or main partners, sex workers contend with the third category of paying partners. The addition of paying partners introduces added factors for condom use decision-making. First, the economic component of commercial sex may motivate sex workers to accept more money for unsafe sex with a paying partner (Shayne and Kaplan, 1991). Second, sex workers may perceive a lack of power in their relationship with a paying partner because they are often treated as objectified commodities; if this power imbalance is challenged, clients may attempt to reaffirm it by means of threats or actual violence (Karim, 1995). This lack of power is a disadvantage for sex workers' condom use negotiations. Furthermore, many studies have shown that sex workers use condoms less with main partners as compared with paying partners (McKeganey, 1994). For example, in the San Francisco study, 94% of the women reported sometimes or always using condoms with paying partners, as compared with 25% who used condoms sometimes or always with their main partners (Dorfman et al., 1992).

The high numbers of sexual partners that characterize sex work particularly increases the likelihood of exposure to HIV infection (Onorato, 1995). Cal-PEP estimates that female street-based sex workers may see between 10 and 15 clients per day, putting the annual figure probably into the thousands (Lockett, 1995). Estimates for off-street sex workers are somewhat lower; Cal-PEP estimates that off-street workers may see between three and 10 clients per day. These figures are likely to be even lower for male sex workers. A San Francisco study of condom failure revealed that the median number of clients for street-based male sex workers was six for the previous week, or over 300 per year (Waldorf and Lauderback, 1993). Risk is compounded by the fact that paying partners may themselves be either HIV-infected or at elevated risk for infection.

Non-injection substance use during sex increases sex workers risk for HIV infection. Overall, sex workers appear to use substances more than those who do not trade sex. As with injection drug users, non-injection substance users may exchange sex for the drugs they use and, conversely, sex workers may use drugs to more easily endure their circumstances. Most studies reporting sex workers' substance use and HIV risk focus on crack cocaine smoking because of its association with unprotected intercourse and burns in the mouth that increase risk of oral transmission (Boles, 1994; Dorfman, 1992; McKeganey, 1994). For example, 66% of the San Francisco study sample used crack (Dorfman et al., 1992). Overall, Cal-PEP estimates that at least 50% of street-based sex workers are addicted to substances (California HIV Prevention Plan, 1995). Moreover, McKeganey (1994) reports that 57% of his sample used drugs during sex with their paying partners.

Other characteristics commonly found among commercial sex workers may increase HIV risk. Several studies have reported a strong connection for both men and women between child sexual abuse and involvement in commercial sex work (Bartholow and Doll, 1994; Cunningham et al., 1994; Zierler et al., 1991). As discussed in another section, survivors of child sexual

abuse often have low self-esteem, experience major depression, and are more likely to be revictimized as adults, all of which may contribute to increased risk for HIV infection (Allers et al., 1993). Street-based sex workers are particularly vulnerable to physical and sexual assault by paying partners and others to whom they are exposed on the streets (Karim et al., 1995). Forced sex further prohibits safe sex measures and violent sex may rupture tissue and provide a more immediate venue for infection.

Commercial sex work is a primary economic alternative for many transgender people, and a large percentage of the estimated 4,000 to 6,000 transgender people in San Francisco (Whitlock, 1995) are known to rely on the sex industry for their subsistence. Transgender commercial sex workers' risk for HIV infection may be different from other groups. One study reports that transgender sex workers are more likely to have receptive anal sex with their paying partners than with their steady partners, a behavior with direct consequences for HIV infection if protection is not used (Elifson et al., 1993). Pre-operative transgender sex workers who are trying to earn money for gender confirmation surgery may perceive a monetary incentive for unprotected sex as beneficial in the moment, despite the HIV risk implied.

It is important to note that a lower infectivity rate, lower STD rates, and a relatively high rate of condom use with paying customers was reported for San Francisco sex workers by Dorfman et al. (1992) compared to findings in other cities. These data indicate that sex workers in San Francisco, while at high risk overall, may be at lower risk than sex workers in other cities. This may be explained by the early and effective HIV education interventions that were promoted in San Francisco by prostitute-specific providers.

Unique barriers to HIV prevention that accompany commercial sex work, puts sex industry workers at increased risk. The illegal status of sex work has many effects. First, sex workers tend to remain as invisible as possible to avoid police attention. In doing so, they also remain hard-to-reach by outreach workers. Additionally, sex workers surveyed as part of the planning process for the California HIV Prevention Plan reported that the police often confiscate condoms as evidence of their illegal sex work activity (California HIV Prevention Plan, 1995). Additionally, most sex workers are in their trade out of economic necessity; thus, any HIV prevention effort must either work within that paradigm or offer a viable employment alternative. Furthermore, sex workers often resist street-based HIV education from outreach workers because of the time, and hence lost income, involved (California HIV Prevention Plan, 1995).

Sex workers, as with impoverished and homeless populations, may tend to value immediate survival needs over long-term health issues. According to a sex worker quoted in Karim et al. (1995), "When you are a prostitute, you do not think of tomorrow; you just think of now." An effect of this value orientation is often the refusal to use protective measures in sexual situations if a more immediate benefit, such as more money or goods, is offered.

How Does Commercial Sex Work Increase HIV Risk?

Circumstances and consequences of commercial sex work increase HIV risk in the following ways:

- high numbers of sexual contacts;
- high prevalence of STDs;
- high rates of substance use/abuse;
- high rates of forced and/or rough sex (leading to abrasions, lesions, etc.); and
- less voice in using condoms.

Who Are the Commercial Sex Workers in San Francisco?

The clandestine effect of commercial sex work's illegal status poses difficulties for estimating this population's size and demographic characteristics. In the absence of such data, estimates may be drawn from other informed sources. According to Cal-PEP, there may be as many as 15,000 sex workers in the San Francisco Bay Area, including street-based and off-street groups. Of these, approximately 10% to 25% are estimated to be street-based and the other 75% to 90% work out of hotels, apartments, massage parlors, or some other dwelling (California HIV Prevention Plan, 1995; Lockett, 1995). Service providers suspect that the street-based sex workers are at highest risk for HIV infection because they lack resources and work in more vulnerable situations. Also, if the paying partners of street-based sex workers are at higher risk, the risk for street-based sex workers is increased accordingly.

Service providers estimate that illegal sex work is conducted by some employees in almost all of the 106 legally licensed massage parlors in San Francisco. Women are most often employed in these parlors and there may be between three and 10 people doing sex work with as many as five to 10 clients per day in each parlor.

Service providers strongly suspect that in San Francisco there are more female sex workers than male sex workers. Nonetheless, there is also a significant number of males and transgender male-to-female people who sell sex. The ethnic distribution of sex workers may resemble statistics for populations living in poverty. Cal-PEP estimates that most commercial sex workers are between the ages of 18 and 37 years. However, many sex workers also in their early and mid-teens—typically those who begin sex work on the streets—as well as some who work up to the age of 50 years. While some sex workers do earn medium to high incomes, they are disproportionately poor overall (California HIV Prevention Plan, 1995).

Finally, arrest rates provide another, although limited, source of information for numbers of sex workers in San Francisco. In 1993, there were a total of 1,785 arrests for prostitution. Of these, the overwhelming majority (98%) were adults and 67% were women (California Bureau of Criminal Statistics, 1993). Given Cal-PEP's estimate that 10-25% of sex workers ever get arrested, the population total could be as high as their 15,000 estimate (Lockett, 1995).

Multiple Partners and Risky Partners

Most research considers “sex with multiple partners” to be sex with more than one partner in the past year. A risky sexual partner is typically defined as someone who is HIV-positive, uses or has used injection drugs, has been nonmonogamous, had a blood transfusion prior to 1985, or is a hemophiliac.

What Is the Connection Between Multiple Partners/Risky Partners and HIV Risk?

Multiple Partners

Generally, people who have sex with multiple partners are at greater risk for HIV infection than those who have sex with a single partner because the probability of contact with an infected individual increases as the number of partners increases (Catania et al., 1992; Dolcini et al., 1995). Furthermore, the risk of HIV infection increases as the number of sexual partners and contacts increase even if condoms are used consistently because the probability of condom failure (i.e., they are used improperly, break, or slip off) similarly increases.

Condom use patterns are important to consider when discussing the HIV risk associated with multiple partners. Even though the probability of encountering an HIV-infected partner increases with the number of partners, the actual risk derives from the lack of protection used with these partners. Condom use patterns with people who have multiple partners are often differentiated according to type of partner, i.e., whether the partner is primary (or steady) or secondary (or casual).

Given this distinction, a typical pattern emerges of little or no condom use with primary partners and increased condom use with secondary partners. To illustrate, Leigh et al. (1993) found that among a large national sample only 8% of those reporting more than one sexual partner used condoms every time they had sex. When partner type was considered, 23% reported using a condom every time with a casual partner, implying that “although respondents with more than one sexual partner report using condoms only rarely when all partners are considered, their condom use with nonprimary partners is somewhat higher.” Dolcini and colleagues (1995) report similar findings from the San Francisco-based AIDS in MultiEthnic Neighborhoods (AMEN) Study: “Consistent condom use among those with primary partners was about 5% regardless of how many additional partners the respondent reported. For secondary partners, overall consistent condom use was higher at 15% but still not at levels that afford protection against STDs.”

Studies have found that the rate of HIV seropositivity among those who report sex with multiple partners is higher than those who report sex with single partners. For example, in a study of injection drug-using women, rates of HIV infection increased significantly as the numbers of partners with whom they traded sex for goods increased: 23% of those who reported not exchanging sex for goods, 24% of those who reported exchanging sex with fewer than 50 partners, and 48% of those who reported exchanging sex with more than 50 partners were HIV-positive (Astemborski et al., 1994). Additionally, Nemoto et al. (1990) report that among the

women in their sample of injection drug users, those who were HIV-positive reported more male sex partners in the past year than those who were HIV-negative.

Risky Partners

People can also be at risk as a result of their partner's behavior. For example, married women are unlikely to use condoms with their spouses if they assume monogamy. However, a large national survey of the general U.S. population shows that of those married, 3% White males, 2% White females, 19% Black males, and 4% Black females had sex with two or more partners in the previous year (Anderson and Dahlberg, 1992).

Sex with partners who use injection drugs or who are HIV-positive similarly increases risk. For example, in the San Francisco-based AIDS in Multi-Ethnic Neighborhoods (AMEN) study, "White women, compared to all other groups, were more likely to report having had a sexual partner who used injection drugs in the last year, ever having a sex partner who was HIV-positive ... and knowing that they had a bisexual male partner" (Peterson et al., 1992).

How Does Sex With Multiple Partners and Risky Partners Increase HIV Risk?

Sex with multiple partners and partners who are at high risk increases risk of infection in the following ways:

- the probability of encountering an infected partner increases as the number of partners increases;
- condom use patterns often differentiate according to partner type (e.g., steady, casual, paying) and unprotected sex with steady partners is most common; and
- sex with a partner who engages in risk behavior increases the likelihood of their infection, thus presenting the possibility of subsequent transmission.

Who Has Multiple Partners and Risky Partners?

There are considerable data for both San Francisco and the general U.S. population regarding sex with multiple and risky partners. In a San Francisco Bay Area county survey, 16% of all men, 9% of all women, and 29% of all respondents aged 18 through 24 years were found to have had three or more sexual partners in the previous year (Trocki, cited in Leigh et al., 1993). This figure is higher than those found by Anderson and Dalhberg (1992) for the general U.S. adult population, 13% of whom reported having sex with two or more partners and 3% of whom reported having sex with five or more partners in the past year. Applying this percentage to the U.S. population total, Anderson and Dalhberg estimate that "4.8 million Americans have more than 5 partners."

National studies surveying the sexual behaviors of various groups in the U.S. report specific data for these groups. Leigh and colleagues (1993) report that 13% of White respondents in their national survey had sex with more than one partner in the past year.

Peterson and colleagues (1993) report that among the heterosexual Black respondents in their large national sample, 18% reported having two or more sexual partners in the past year. More males (30%) than females (10%) and more single (25%) than married or cohabitating adults (8%) in this sample were found to have two or more sexual partners. For these Black heterosexuals, the percentage of those with multiple partners declined slightly among those of higher income and age. Dolcini and colleagues (1995) report similar findings from the AMEN study: African American men without a primary partner were the most likely of their sample to have multiple partners.

Sabogal and colleagues (1993) found that among heterosexual Hispanics in a large national sample, 11% reported having had multiple sex partners in the past year. As with other ethnicities, a significantly higher percentage of men (17%) than women (4%) reported having multiple partners. This is significantly lower than Van Oss Marin and colleagues' (1993) finding among their sample in which 40% of the men reported having multiple female partners in the past year. Sabogal and colleagues considered other determinants of having multiple partners such as degree of acculturation, age, marital status, level of formal education, and income. According to Sabogal and colleagues, "Acculturation into the U.S. mainstream was associated with an increase in the number of partners among both genders." Additionally, those who reported to have multiple partners "tended to be young (aged 18-29), unmarried, highly educated, and of lower income."

Grinstead and colleagues (1993) report on the sexual risk behaviors of women based on their sample from 23 U.S. urban areas. Overall, 15% of these women reported having had sex with multiple partners, a risky main partner, or both. Factors that were related to an increase in number of sexual partners include age between 18 and 29 years and more than 12 years of education. Across groups, "single women were significantly more likely to have had multiple partners than were married or cohabitating women."

Many studies report that young adults (i.e., 18 to 29 years old) are more likely than those older than 30 years to have multiple sex partners. Binson et al. (1993) report findings from a national survey they conducted with urban heterosexual young people between the ages of 18 and 25 years. Of this large sample, 24% reported having had sex with multiple partners. In particular, they found that, "Young men are more than twice as likely as young women, and unmarried respondents are eight times as likely as married respondents, to have multiple partners." Condom use with these partners was low overall, as approximately 40% never used condoms with main or casual partners. Of greater concern, however, is the finding that condom use decreased with increasing number of partners.

Peterson and colleagues (1992) provide information on risky partners among White and Black heterosexual adults in the AMEN study. White women (17%) and men (11%) were more likely than Black men (4%) and women (5%) to have had an injection drug-using partner. White women (6%) were the only group to knowingly have had a bisexual partner. All groups reported high levels of partners who had sex with multiple partners, ranging from the highest rate of 64% among Black men to 33% among Black women.

LACK OF ACCESS

The issues in the “lack of access” co-factor include knowledge of services, language, and literacy. Individuals and populations differ in the access they have to prevention information and education services. Those who do not have full access to prevention resources may be at higher risk for HIV infection, primarily due to lack of information about risks and how to avoid them. The specific barriers to access vary according to the population and according to the particular prevention strategy under consideration, but lack of access can be conveniently examined under three categories: poor knowledge of services, language barriers, and low literacy. These categories are not mutually exclusive, and they may overlap and interact with other co-factors such as low self-esteem, homelessness, discrimination, and institutionalization.

Knowledge Of Services

A lack of knowledge about prevention services and their availability is clearly a barrier to obtaining accurate information about HIV. Prevention services comprise a variety of interventions including outreach, hotlines, peer counseling, condom distribution, and advertising in a variety of media. Many of these interventions are designed for and targeted to specific populations. To understand the lack of knowledge about prevention services, it is necessary to consider both the particular kind of intervention and the targeted population. Some populations may require very specific efforts in order to become more aware of the prevention services available, and the services themselves may have to be carefully designed to reach the population. Language, culture (or acculturation), and literacy are often important factors that limit knowledge of services, but other factors, both personal and institutional, may play a critical role.

In some situations, the same factors that limit knowledge about HIV/AIDS also limit knowledge about prevention services. The City Clinic study (1992) found racial/ethnic and education differences in knowledge about AIDS, and the authors considered that at least some of the racial/ethnic differences in knowledge were correlated with differences in level of education. It seems likely that knowledge about services may vary in the same way. Language barriers and low literacy may limit not only access to prevention services but knowledge of the existence of those services as well, and they are also associated with education and acculturation; the ways language barriers and low literacy operate as obstacles to access are discussed more fully as a separate category below.

One barrier to finding out more about prevention services is a fear of stigmatization. Such stigmatization of HIV is, at least in part, usually a result of homophobia, gender discrimination and/or vilification of IDUs within the community. In communities where the social stigma attached to HIV is particularly powerful, the ability to make inquiries anonymously is especially important. This is often true for closely knit communities; the individual may fear that even the disclosure of any interest in HIV will be seen as suspect. In these circumstances, the perception of absolute confidentiality is also very important for continuing prevention services. Peinkofer (1995) says that, due to the close knit networks in communities of the deaf, and the fear of social isolation, confidentiality is of great importance to the deaf in accessing HIV-related services. In a study of who seeks HIV testing, Paringer and colleagues (1991)

found that “state policies that protect individual privacy encourage individuals to seek testing.” Counseling at test sites is an important way of learning more about prevention services.

This fear of stigmatization is very common, but is particularly important in some Asian communities. There is fear “that any disclosure will result in community-wide disclosure of a person’s most intimate, personal life. Hence many gay Asian/Pacific Islander men will not disclose outwardly nor acknowledge internally behaviors that put them at risk. Out of denial, many high-risk individuals will neither acknowledge that they are at risk nor identify with a service which targets risk behavior; consequently utilization of education prevention services is low and perpetuation of risk behavior remains high” (Choi et al., 1995). In this case, a lack of acculturation and the lack of English language literacy may also be important factors in the lack of access.

Populations that are in some way isolated from the larger society are likely to have less knowledge of HIV prevention services. Within the urban setting, there are some populations, such as homeless subpopulations, who avoid shelters and most other service providers, which have limited channels of communication. Some of these are homeless youth. People with limited physical mobility may also have difficulties in accessing some prevention services (California HIV Prevention Plan, 1995). Additionally, based on a survey of providers in agencies serving Asian/Pacific Islander women in San Francisco and Alameda Counties, Wilkinson (1995) reports that access to HIV prevention information is even more difficult for Asian/Pacific Islander women compared to their male counterparts given that their circumstances are often characterized by “enormous social isolation, economic disadvantage, and cultural expectations that make it harder for women to get services.”

There may be institutional barriers which control a population’s access to certain information. Thus, official policies may limit the access of in-school youth, those incarcerated in the criminal justice system, and those (such as some of the mentally ill and some of the developmentally disabled) who reside in other institutional settings. In some cases, such as those with severe mental illness or severe developmental disability, there may be limits to the individual’s capacity to understand more about prevention services.

Another barrier is distrust of the service system itself. This is often associated with various kinds of discrimination. For some disenfranchised populations, the provider of prevention services is seen initially as a representative of the larger social system, which is perceived as antagonistic against their well-being. For example, some in the transgender community distrust service providers, feel misunderstood by them, and feel that providers regard transgender people as expendable. In minority ethnocultural communities, there is a common belief that HIV/AIDS is part of a genocidal CIA experiment, signaling both their distrust of the service system and the hopelessness felt in the face of overwhelming difficulties: “While beliefs about genocide are real, they may prevent persons in minority communities from making informed judgments about how AIDS is a threat to individual and community safety” (Stevenson and White, 1994).

Language Barriers and Low Literacy

There are very practical issues of language barriers and low literacy that concern access to prevention education and services; these issues can become very complicated in practice. Understanding of any message always occurs in a cultural context; it is not just a question of conceptual understanding of the content of a message, although that is extremely important. The impact of the message will also depend on whether it is perceived as relevant to the recipient and on the perceived intent of the sender. Therefore the intended recipient's perception of his or her relation with the sender is an important part of the way the message is received. There are also broader cultural issues of critical importance, such as the valuation and associations of particular risk behaviors that may have an important impact on the way a message is received. Particularly in disenfranchised and impoverished communities, it may be important to connect HIV with other survival problems (such as lack of health care and lack of employment) that are simultaneously challenging the community. As Stevenson and White (1994) state, "Without a relevant context within which AIDS education can take root and grow, it becomes useless banter that will not be internalized."

There has been a great deal of discussion about the need to make prevention education culturally and linguistically appropriate and relevant. Whether the setting is street outreach, test site counseling, or printed material, it is important that the information be provided in a way that the recipient can understand. Often this entails the use of colloquial rather than medical or technical vocabulary. The appropriate level of vocabulary may correlate with level of education and other socio-economic variables. In printed materials, this same set of considerations applies to the design of material so that it is made as appropriate as possible for the intended audience. This includes not only vocabulary but also layout, type style, and possible illustrations. In many cases, existing genres such as "tele-novela" comic books have been appropriated for prevention education (California HIV Prevention Plan, 1995).

Clearly, prevention education and services must be available in the language of the recipient in order to be understood. Many immigrants have little or no English skills; many immigrants never developed literacy in their own languages, and there are many native-born U.S. residents who have little or no literacy skills. The problems of addressing prevention interventions to adults who are not literate in any language differ from those of addressing an adult who has literacy skills in a language other than English. The problems of addressing a particular audience in culturally appropriate ways can, however, be quite complex at levels beyond questions of national language and level of literacy. Issues of trust and relevance to the target audience are often addressed by a "people like us" strategy, such as the use of indigenous outreach workers who come from the same ethnic and socioeconomic background as their contacts (California HIV Prevention Plan, 1995). Pragmatic success may entail the tailoring of prevention services to narrowly targeted audiences in terms of criteria including ethnicity, language, social class, education, and sexual identity (Choi et al., 1995).

These issues have been linked to other co-factors, such as self-esteem: "Low levels of literacy, lack of education, and language barriers can also affect a person's view of him or herself. This is because these characteristics relate to how a person functions in a society that

values, and in many ways requires, a formal education and knowledge of English” (UCSF AIDS Health Project, 1995). Some research has also recognized disempowerment, for both individual and community, as a co-factor for HIV. Disempowerment in this case is understood as a perceived external locus of control or lack of personal efficacy (Wallerstein, 1992 [cited in Choi]; Stall et al., 1988; Stevenson and White, 1994). Some prevention strategies, such as prevention case management, may aim directly at increasing the sense of personal efficacy and self-esteem. In some cultural contexts, this may be difficult because, for example, there are no non-stigmatizing terms for a gay identity.

There are other populations that lack access to prevention services because of language and literacy difficulties. For example, there is little prevention information in Braille for the blind (California HIV Prevention Plan, 1995). In a wide-ranging paper on HIV education for the deaf, Peinkofer (1994) points out that deaf people depend heavily on visual components for understanding. The appropriate interpreted lectures and captioned videos do not reach a sizable portion of the deaf. Even though many of the deaf are taught English, it is very difficult to learn without hearing the language spoken, and many of the deaf read English at an elementary school level; they may also miss concepts and idiomatic meanings that do not translate well to Sign Language. Much of the available written material on HIV prevention in English is not appropriate for deaf Americans.

How Does Lack of Access Increase HIV Risk?

Lack of access can increase risk in several ways, as outlined below:

- People cannot use services unless they know of such services;
- Some groups may be reluctant to access services for fear of stigmatization. They may fear that asking for information will entail disclosure of their sexual orientation or drug behavior.
- Some individuals distrust the service system.
- Many groups need information in a special format or language.

Who Lacks Access to HIV Prevention Education and Services?

Many of the individuals and populations that lack access to HIV prevention services are those identified by one of the other co-factors for HIV risk: the homeless, the impoverished, youth, the institutionalized, those who are the objects of discrimination, and the differently abled. Some of these are considered by service providers to be “hard to reach” populations: runaway youth; the homeless who avoid shelters; and closeted gay or non-gay-identified men who have sex with men, particularly in homophobic communities. The lack of access is associated with their isolation and/or disenfranchisement from the larger society. In some cases, as with some institutionalized populations, the lack of access is directly imposed from the outside by coercive social forces; in some cases, as with closeted gay men in homophobic communities, the lack of access is directly imposed by the subjects themselves, as a result of fear of disclosure and its consequences. Those who face systematic discrimination may generalize their distrust of the larger society to include service providers. In the Wilkinson (1995) study,

for example, Asian/Pacific Islander women in general are described as having significant cultural, linguistic, social, and economic barriers to HIV prevention services.

Exhibit 3.71 below is drawn from the 1990 U.S. Census data for San Francisco County. It indicates that less than 58% of the population over 5 years of age speak only English. For the age range of 5 to 17 years, there are only 48% who speak only English, compared to 59% of the population between 18 and 64 years of age. However, the younger group has only 1% who do not speak English well or at all, indicating a high level of multilingualism for that group.

The population with the highest percentage of those who speak English not well or not at all—those least likely to have access to HIV prevention services—are those 65 years and older. Of that group, 19% do not speak English well or at all. However, based on current AIDS epidemiology, this age range of 65 and older is less at risk for HIV infection than the range of 18 through 64; of the latter group, there are 12% who speak English not well or at all.

It is important to note that the following census data likely underestimate the actual proportion of San Francisco residents for whom access to HIV prevention services and messages is restricted because of language barriers. The following presents persons categorized in the Census as speaking English “not well” or “not at all.” The census category of speaking “limited” English is not presented, but includes a number of people who may know enough English for some tasks but not enough to access HIV prevention information and services.

Exhibit 3.71

San Francisco Residents Over Age 5 Who Speak English “Not Well” or “Not at All”

Age Group and Language(s) Spoken	Total Population Size	% of Age Group	Percent of Total
Total San Francisco Population Over Age 5 Years	688,689		
Total Population Over Age 5 Years Who Speak English “Not Well” or “Not at All”	86,228		13%
Population Ages 5 to 17 Years	81,479	100%	
Speaks English Only	39,227	48%	
Speaks an Asian or Pacific Islander Language	25,111	31%	
Of these, speaks English not well or at all	4,246		17%
Speaks Spanish Language	13,312	16%	
Of these, speaks English not well or at all	1,970		15%
Speaks Other Language	3,829	5%	
Of these, speaks English not well or at all	589		15%
Total Population Ages 5 to 17 Years who Speak English “Not Well” or “Not at All”	6,805		8%
Population Ages 18 Years and Over	607,210	100%	
Speaks English Only	357,369	59%	
Speaks an Asian or Pacific Islander Language	142,820	24%	
Of these, speaks English not well or at all	55,220		39%
Speaks Spanish Language	62,621	10%	
Of these, speaks English not well or at all	18,159		29%
Speaks Other Language	44,400	7%	
Of these, speaks English not well or at all	6,024		14%
Total Population Over Age 18 Years who Speaks English “Not Well” or “Not at All”	79,423		13%

SOCIAL/SITUATIONAL CO-FACTORS

There are factors in social or cultural groups that may increase risk for HIV, such as low perception of risk or discrimination. Additionally, certain situational factors, such as incarceration, may increase risk. This section describes three examples of social/situational co-factors: incarceration, low perception of risk, and discrimination.

Incarceration

Incarceration and other forms of institutionalized living create unique conditions which may increase HIV risk. This section discusses these conditions and other factors that may increase HIV risk for incarcerated people. Other forms of institutionalization such as residential drug or psychiatric treatment are not specifically addressed; however, some of the same issues apply and may be extrapolated from the following discussion.

What Is the Connection Between Incarceration and HIV Risk?

There is evidence that AIDS is becoming the leading cause of death in U.S. prisons (Gellert et al., 1993). Rates of HIV seropositivity among prison inmates range widely according to geographic location and often reflect local epidemic trends. In an extensive study of California inmates (Singleton et al., 1990), blood samples collected for other purposes were blindly tested for HIV antibodies. This study found an overall seropositive rate of 3%. Among males, rates were significantly higher for those in the San Francisco Bay Area (5%) as compared with those in southern (2%) and central California (1%).

HIV seropositivity rates for prison inmates in other U.S. states also differ significantly. Epidemiologic studies in 10 states (Indiana, Iowa, Maryland, Michigan, Mississippi, New Mexico, New York, Oregon, Tennessee, and Wisconsin) reported a range of HIV infection from 0% to 19%, with Maryland (15% for men and 7% for women) and New York (17% for men and 19% for women) having the highest rates (Singleton et al., 1990).

A national study conducted in 1994 by the U.S. Department of Justice's National Institute of Justice (NIJ) and the Centers for Disease Control and Prevention (CDC) surveyed all 50 state prison systems for adults, 81% of city/county jail systems "with adult male inmate populations among the largest in the country" (Centers for Disease Control and Prevention, 1996), 82% of state systems for juveniles, and 64% of "city/county systems with the largest populations of confined juveniles" (Centers for Disease Control and Prevention, 1996). According to these sources, there were 5279 cases of AIDS among current inmates, a rate of 5.2 AIDS cases per 1,000 adult inmates (over the age of 18 years) which is nearly six times the 0.9 cases per 1,000 adults in the general U.S. population. For juvenile inmates, a cumulative total of 60 AIDS cases and four current cases was found—an AIDS case rate of less than 1%. However, "the incidence rates for gonorrhea, a marker of high-risk sexual activity associated with HIV transmission, were 152 times and 42 times higher among confined juvenile females and males, respectively" (Centers for Disease Control and Prevention, 1996).

The high rates of HIV seropositivity among people entering the criminal justice system pose a threat of infection through unsafe sexual and injection drug use practices to others who are incarcerated. Unique patterns of prison inmate mobility, e.g., restricted mobility within a particular institution and frequent transience between institutions, create a closed pool of infection for those within the system. Furthermore, many people involved in the criminal justice system experience more than one episode of incarceration, and therefore periodically re-enter the community (Gellert et al., 1993). In this manner, the otherwise closed pool of infection within the system opens to those in outside communities.

HIV risk among incarcerated populations is primarily discussed in the literature as a correlate of the rate of injection drug use among people in the criminal justice system. Although epidemiologic studies point to pre-incarceration injection drug use as the primary venue of infection for inmates (Behrendt et al., 1994), high rates of injection drug use have also been reported during incarceration. According to the Centers for Disease Control and Prevention (1992), "A report by the National Institute on Drug Abuse indicated that, based on a study during 1987-1989, approximately 83% of injection drug users reported having been in jail or prison at some time." Additionally, the California HIV Prevention Plan (1995) reports that, "One focus group held in San Quentin Prison by the Marin County AIDS Project in October 1993 found that between 7% and 10% of inmates continue to inject drugs while in prison." It is unlikely that prisoners who inject drugs use clean needles consistently (California HIV Prevention Plan, 1995).

Just as drug use continues in many prisons, so does sexual activity. Incarceration restricts potential sexual partners to other inmates, thus contributing to situational homosexuality (Singleton et al., 1990). For example, in a Tennessee study of prison inmates by Horsburgh et al. (1990), 17% of inmates reported homosexual activity while incarcerated. Condom availability in prison systems is a concern, although the San Francisco correctional system has been a leader in this respect. Consenting sexual activity is assuredly risky if condoms are not available. Rape in prison settings also occurs and the predatory approach to sexual encounters that some prisoners take fuels violent behavior. Thus, the risks associated with rape discussed in a previous section apply.

High rates of non-injection drug use among those in the criminal justice system may also increase risk for HIV infection. In a large study of women inmates in New York City, Magura et al. (1993) found that 65% reported using crack and 52% reporting drinking alcohol in the 30 days prior to incarceration. Additionally, the National Commission on AIDS (1991) reported that 47% of 262 young people incarcerated in Los Angeles drank alcohol in situations that led to unprotected intercourse. With the passage of the "Three Strikes" law in California, the number of long-term prison inmates arrested for substance-related offenses can be expected to increase (Pappas, 1995).

Few effective HIV/AIDS prevention programs for inmates contributes to the likelihood that this population remains involved in high-risk behaviors. The 1994 NIJ/CDC study found that, "In 1994, of the 1207 state and federal facilities, 582 (48%) were providing instructor-led HIV/AIDS education programs, 90 (7%) were operating peer-led programs, 865 (72%) were

using audio-visual materials, and 1068 (88%) were using written materials...Only two state prison systems (Vermont and Mississippi) and four city/county jail systems (New York City; Philadelphia; San Francisco; and Washington, DC) reported making condoms available to inmates in their facilities” (Centers for Disease Control and Prevention, 1996, emphasis added).

How Does Incarceration Increase HIV Risk?

Incarcerated populations are at increased risk for HIV infection because:

- Many characteristics of incarcerated populations, especially pre-incarceration injection drug use, increase the rates of HIV infection among those entering the criminal justice system. Unsafe injection drug use and sexual activity increase the possibility that other inmates become infected.
- Inmates’ sexual activity is restricted, and situational homosexuality occurs in prisons. The forced nature of some sexual encounters in prison may increase risk of HIV infection.
- Access to prevention materials and education is inconsistent across the country’s criminal justice system. California is a leader, however, with 45 HIV counseling and testing sites and five HIV health education/risk reduction programs in correctional facilities (Centers for Disease Control and Prevention, 1992). Also, San Francisco is one of only four city/county jail systems that makes condoms available to inmates (Centers for Disease Control and Prevention, 1996).
- The transient and episodic nature of incarceration creates a unique pattern of possible transmission among inmates and from parolees to other community members.

How Many Parolees and Currently Incarcerated People Are in San Francisco?

According to the California Department of Corrections, there are approximately 2,454 parolees living in San Francisco, and 90% of these are male. Exhibit 3.72 presents current data on certain demographic characteristics of the incarcerated population. As with parolees, San Francisco inmates are primarily male (90%). People of color are disproportionately represented among the prison population as compared to their representation in the general San Francisco population.

According to the most recent census, there are 124 boys and 25 girls currently detained at San Francisco’s Youth Guidance Center (YGC). In addition to the youth detained at YGC, there are many youth who are in custody of the Juvenile Probation Department. These youth either live at home and report to their probation officer and community day programs or are housed in alternative community settings.

Exhibit 3.72	
San Francisco County Jails	
Incarcerated Population Demographics	
Average Daily Census	n=2,400
Demographic characteristics	
Gender	
Female	10%
Male	90%
Ethnicity	
African American	50%
Asian	2%
Hispanic	27%
Native American or Samoan	1%
White	19%

Source: SF County Sheriff's Department

Low Perception of Risk

Individuals' attitudes and values are shaped by their culture and society. Some of these attitudes and values may influence actions that can place people at increased risk for HIV. This section discusses how attitudes toward perceived risk are influenced by cultural forces. This is clearly not the only cultural influence on HIV risk; the study of culture is vastly complex. There are a host of other social and cultural values and beliefs which also may affect HIV risk, and providers will need to conduct more thorough needs assessments of the social or cultural influences on their target population.

What Is the Connection Between Low Perception of Risk and HIV Risk?

Perception of risk for HIV infection is a necessary precursor for risk reduction behaviors. Cochran states that the perception of risk is necessary to change sexual practices, but should this perception be inaccurate, the change may not be effective (Quinn, 1993). A number of researchers indicate that lower perceptions of risk correlate with involvement in high risk behaviors (Crawford, 1993).

Many studies and reports indicate that members of ethnic communities perceive their risk of HIV infection to be low. For example, among Latina/o and African American men and women attending an STD clinic, only 22% assessed that they were at high risk of contracting an STD, and only 14% assessed that they were at high risk of contracting HIV; 71% assessed that they were at low risk of contracting HIV (O'Donnell et al., 1993). A study of families in transitional residential shelters indicated that African American mothers perceived themselves to

be at less risk than their Caucasian counterparts (Crawford et al., 1993). Younger gay Navajos think of AIDS as a problem only of older gay men or of urban Indians, and not as something that affects rural/reservation younger people (Rowell, in press). Although a large number of gay Asians or Pacific Islanders report practicing unsafe sex, surprisingly few perceive themselves to be at risk for AIDS. In the Gay Asian and Pacific Islander Men's Study, 85% of the respondents believed they were unlikely to contract HIV (Choi et al., 1995).

One factor influencing the low appraisal of risk shown in many of these studies may be the belief that AIDS is a disease of White homosexual men (Airhihenbuwa et al., 1992; Quinn, 1993). In a survey of community-based prevention providers working in ethnic communities, over 40% of respondents identified "It's a gay White disease" as a myth operating in their community (Stevenson and White, 1994).

The notion that certain groups are not at risk because AIDS is a White homosexual disease is exacerbated by the underreporting of AIDS cases among certain groups. Underreporting is a greater problem among Asian/Pacific Islanders (Choi et al., 1995) and Native Americans (Multicultural Liaison Board/Office of AIDS, 1994). For example, studies by the CDC in Los Angeles and Seattle confirm that, in those two cities at least, Native American AIDS cases were misreported as White or Hispanic in 50% to 75% of the cases (Rowell, in press).

Another factor that may influence perception of HIV risk is the presence of other risks; that is, HIV risk may seem low when compared to other, more immediate risks that many in poor communities face (Battle et al., in press). For some, their "life reality is that of being poor, Black, Latina, or outside the law through drug abuse or street prostitution, they have always lived with risks of some kind. AIDS is simply one more risk with which to be concerned" (Mays and Cochran, 1988). "The key to poor ethnic women's response to AIDS is their perception of its danger relative to the hierarchy of other risks present in their lives and the existence of resources available to act differently" (Mays and Cochran, 1988).

The level of acculturation may also influence perception of risk. Latina women who are less acculturated reported a significantly lower perceived risk of AIDS compared to highly acculturated Latinas, and their behaviors indicated that they were in fact at lower risk. However, less acculturated Latinas may actually be at greater risk than their relatively safe behavior would suggest. While highly acculturated Latina women appear to be somewhat at risk for HIV, through both injection and non-injection drug use and sex with multiple partners, less acculturated Latinas are more likely to contract HIV infection through their husbands or partners (Nyamathi et al., 1993a).

How Does Low Perception of Risk Increase HIV Risk?

Lower perception of risk correlates with involvement in high-risk activities. Persons who do not feel threatened by HIV are unlikely to take precautionary measures. Furthermore, among some groups, there remains a belief that HIV is a White gay disease that cannot harm them. The underreporting of cases in some communities increases the perception that these

communities are not at risk. Additionally, in many communities, particularly poor communities, the risk of HIV seems low when compared with the presence of many other risks.

Who Has Low Perception of Risk?

- To answer this question would require a thorough needs assessment that compares perceptions of risk across the many cultures present in San Francisco. Such a comparison would need to occur among the subpopulations or groups within these cultures, including gays and bisexuals, transgender persons, heterosexual women and men, and young people. Furthermore, distinctions would need to be made based on characteristics such as level of acculturation, substance use patterns, and class. A preliminary examination of the literature indicates that for the following groups this co-factor is of particular relevance: American Indians, Asians/Pacific Islanders, Latino/as, African Americans. This co-factor is especially relevant to women in these cultures and those adhering to traditional values.

Discrimination

Discrimination is a harsh social condition with which many individuals and groups in the U.S. must constantly struggle. Discrimination, or stigmatization, refers to socially defined patterns of prejudice and rejection. An individual or group experiencing discrimination is “discounted, discredited, or rejected by another individual or group, generally for ways in which that individual or group does not conform to a certain set of social standards or expectations” (Public Media Center, 1995a). Discrimination can manifest in many ways, including exclusionary laws, attitudes or public opinions and violence (even murder). In the U.S., discrimination particularly occurs along lines of race/ethnicity, gender, gender identity, sexual orientation, age, and physical and mental ability.

Because of its complex nature, discrimination has not yet been studied in terms of its association to HIV risk. Therefore, this section describes how traditionally marginalized communities experience discrimination and delineates possible influences on risk for HIV infection.

Racism

Racism is a pervasive social norm in the U.S. and is the root of many severe conditions for people in communities of color. Racism is a powerful determinant of the economic, political, and social situations of people in these communities.

Racist economic policies and practices explain to a large extent the disproportionate representation of people of color among the poor. Such policies and practices often determine how resources will be allocated for necessary services, such as health care and other social services. Similarly, community development policies are influenced by racism, such that neighborhoods in which communities of color predominantly reside are often left with insufficient support. In the absence of such support and resources, these areas become

impoverished. Previous sections have described how residence in poverty areas and living in poverty in general are known to reduce health outcomes in general and increase HIV risk in particular.

Among many communities experiencing racism, there is often suspicion and mistrust toward the dominant, White culture. Racist actions on the part of the government, researchers, and service providers have historically provided firm grounds for this mistrust. This sense of mistrust can have an important effect on HIV prevention. If people in communities of color do not trust providers, then it is unlikely that they will be receptive to health and prevention messages.

To illustrate, a 1994 survey of AIDS prevention providers in minority communities indicates that mistrust was among the top four barriers to prevention, along with lack of funds, cultural insensitivity, and denial. These results were essentially uniform among those working in the African American, Latino, and Asian/Pacific Islander communities (Stevenson and White, 1994).

A specific historic event underlies the mistrust that many African Americans feel toward public health messages. From 1932 to 1972, U.S. Public Health Service conducted the Tuskegee Syphilis Study, in which researchers observed approximately 400 poor, Black sharecroppers with syphilis to learn about the untreated disease's progression. Although penicillin was found to be an effective and inexpensive syphilis treatment in 1946, the U.S. government withheld the drug from those in the study for 26 years to continue their observations. The scandal was uncovered in 1972, but by that time 20% of those in the study had died of syphilis (Chavez, 1995; Quinn, 1993).

Other groups carry a mistrust for government and public health agencies based in historical mistreatment, as well. Native Americans in the 19th century were recipients of a government distribution of blankets infected with smallpox. Asians in San Francisco point to the early 1900's, when the bubonic plague in San Francisco's Chinatown went unchecked by the public health department until Whites in nearby neighborhoods became infected. All ethnic communities can relate more examples of policies and practices that incite suspicion and mistrust for White-dominated government and culture.

Cultural insensitivity, a more subtle form of racism, is a primary reason for the insufficiency of services that are culturally and linguistically appropriate for all communities of color. A Eurocentric approach to prevention often results in ineffective interventions for these communities. For example, Airhihenbuwa et al. (1992) state that there is a "perception that AIDS education is being imposed on the African American community by the White majority culture". Similarly, the Multicultural Liaison Board, in its report to the state Office of AIDS in 1994, noted that there is a lack of peer educators reaching African American target groups. They further state that the "multi-cultural" approach to AIDS education—as opposed to specific Afro-centric strategies—most often fuels tokenism. Tokenism is typically an ineffective approach, because it leaves the responsibility for accomplishing "cultural sensitivity" to a single provider or program and does not address the larger service delivery context.

Beyond culturally sensitive prevention and treatment approaches, many communities of color lack full access to health and human services. This lack of access to services is also partly due to racism and is commonly discussed in the research literature and among providers. Racism and its concomitant economic disparity may have indirect effects on access, as well. For example, the barrier of inadequate transportation to certain types of HIV interventions is greater for those living in poor neighborhoods.

The recent passing of the California initiative Proposition 187 clearly illustrates how racist policy can affect health. The application of Proposition 187 not only denies immigrant Latinos, Asians, and others the services they need, but also impacts many people of color who are here legally. Restricting access to health and other social services limits the distribution of HIV prevention information and materials, thus increasing risk for infection.

Homophobia

Like racism, homophobia is a rampant force that serves to maintain difficult psychological, economic, political and social realities for gay, lesbian, and bisexual people—as well as for those questioning their sexual orientation or for those who simply do not seem to conform with heterosexual norms of behavior and appearance. Homophobia dictates the “morally disapproving, personally rejecting, and ambivalent” attitude towards gays. San Francisco, a city known as a haven for homosexual and bisexual individuals, is not immune to the social rule of homophobia.

Homophobia is primarily responsible for the inadequate initial response to the AIDS epidemic, and likely fuels those forces that continue to decrease resources allocated for AIDS-related issues. Throughout the early 1980's, this society's general fear and dislike of homosexual groups sustained a collective denial (on the part of the government, public health service, and private researchers and providers) of the epidemic's gravity. As explained in “The Impact of Homophobia and other Social Biases on AIDS”:

The phenomenon of HIV/AIDS is unique in the American experience because even as it has represented a clear and overwhelming threat to our public health and our national stability, it has simultaneously received less public attention and a more ambivalent government response than any public emergency of a comparable dimension in our century (Public Media Center, 1995a).

Such ambivalence and denial, based on homophobia, has had clear implications for the allotment of resources for HIV prevention and treatment services.

Homophobia may particularly affect young gays and lesbians. Establishing a strong and healthy sense of one's personal identity is severely problematized for homosexual, bisexual, and questioning youth, as a result of institutionalized homophobia. Gay, lesbian, bisexual, and questioning youth must navigate through already difficult developmental stages and confront the

additional barriers placed by a society which disparages and oppresses them. These barriers create stresses which alter the process of identity development, and to that extent they influence risk for HIV infection (Health Initiatives for Youth, 1995).

The stresses created by homophobia for identity development among gay, lesbian, bisexual, and questioning youth are cognitive, emotional, and social. Gay, lesbian, bisexual, and questioning youth often feel socially isolated, which leads to feelings of personal alienation and despair. In response, they may avoid services and internalize feelings of self-hate and self-destruction. These feelings are the basis for such behaviors as suicidal ideation and attempts, alcohol and substance abuse, and clandestine sexual contacts (Grossman, 1994). Self-destructive behavior in general and substance use (especially injection drug use and drug use during sex) in particular increase risk for HIV infection. Clandestine sexual encounters often involve prostitution or other circumstances which make safer sex practices difficult.

AIDS-related stigma has been closely linked to homophobic attitudes. One study points out that people are more likely to scorn gay men with AIDS and to blame them for their illness. For example, “studies in which respondents are asked to react to a hypothetical person—with the person’s medical diagnosis and sexual orientation systematically varied—have consistently shown that people with AIDS were evaluated more negatively than were persons with other illnesses, and that these evaluations were most negative when the person with AIDS was a gay man or contracted HIV through male-male sex” (Herek et al., 1995).

Although HIV/AIDS has been associated with numerous so-called risk groups, the public has fixated on the disease’s connection to gay and bisexual men. Research has shown that “this is not due to the fact that the majority of AIDS cases have continued to occur among drug-using and non-drug-using gay and bisexual men, but rather 1) since the first weeks of the epidemic, when the disease was named Gay-Related Immune Deficiency, AIDS has been inextricably associated in the public consciousness with widely ostracized gay and bisexual populations and behaviors; and 2) that this perception coincides with an underlying prevalent homophobia that permeates virtually all social attitudes toward sexuality and sexual behavior in this nation” (Public Media Center, 1995a).

Homophobia is especially problematic in relation to HIV/AIDS. Unlike racism and sexism, for example, homophobia has never been directly addressed in the public dialogue. As the Public Media Center report continues, “a social consensus condemning homophobia has never been formed in the same way that a consensus has been formed condemning racism, sexism, and other forms of discrimination in American society....Extensive evidence also points to the fact that because the association between HIV/AIDS and homosexuality is so strongly fused, it can significantly impair or block the ability of non-gay individuals to personalize the concept of HIV/AIDS risk, even if they themselves are at high risk of HIV infection” (Public Media Center, 1995a).

Biphobia

Biphobia refers to the unique forms of discrimination that bisexual communities experience. This discrimination is enacted primarily through the rejection of bisexual people from lesbian, gay, and heterosexual communities. This exclusion extends from fears of bisexual sexual behavior, which includes, but is not limited to, homophobia. Lesbian, gay, and heterosexual communities have attempted to deny validity to bisexual identities because of the threat bisexuality poses to the stability of their sexual identities.

Myths regarding bisexual communities contribute to misunderstanding, particularly with regards to the HIV/AIDS epidemic. Identifying as bisexual is often misinterpreted as synonymous with promiscuity and an inability to be monogamous. These stereotypes have led to the persecution of bisexual people as vectors of HIV infection by gay, lesbian, and heterosexual communities. Such persecution, particularly perpetrated by the media in the early years of the epidemic, has established the perception of bisexual people as “high risk” by virtue of their identity.

Bisexual people face significant barriers to receiving HIV prevention messages and services. Most prevention messages only address people’s sexual behavior with a single gender and target either gay and lesbian or heterosexual groups. These prevention messages are not appropriate for bisexual people who may engage in sexual behaviors with more than one gender group. In group settings, bisexuals are usually treated as gay, lesbian, or heterosexual, thus denying attention to their specific prevention needs. Acknowledging these issues and behaviors in group settings could be an important intervention. Inclusive and comprehensive prevention messages which address a variety of sexual behaviors and orientations will not only benefit bisexual-identified people but also others who may engage in a range of sexual behaviors with more than one gender group.

Transphobia / Gender Identity-Based Discrimination

Transgender communities are the least understood, and thus suffer from the most intense discrimination. They are frequently derided in popular media, and are given little attention by HIV/AIDS education efforts. The paucity of information and attention to special needs perpetuates fear, misunderstanding, and most importantly, a degree of HIV risk and infection in these communities.

In San Francisco, where members of the transgender community have consistently struggled to be included in the planning and decision-making processes that affect them, “gender identity” was made a legally protected Human Rights Commission (HRC) category only recently, in January 1995. Now that gender identity is a legally protected category, the HRC is authorized to document and investigate discrimination complaints made by transgendered people. This was the direct result of extensive grassroots community organizing efforts by transgender groups. San Francisco is one of the only cities in the country to legalize this recognition (Boylin, 1995).

A discriminatory social climate also affects a lack of specific, sensitive health care for transgendered people. This lack, coupled with community mistrust of medical providers, may lead to low rates of HIV-related service usage. Additionally, stigma and lack of knowledge about transgendered people places them at a low priority for medical and other service providers. The special needs of transgendered people, particularly for those who are HIV-infected, continue to go unmet.

Discrimination creates significant barriers for transgendered people who want to maintain or seek regular employment (Boylin, 1995). As a result, many members of the transgendered population are compelled to work in the sex industry for subsistence. As discussed in another section, involvement in commercial sex work increases risk of HIV infection for many reasons.

As with all communities who experience discrimination, low self-esteem among transgendered people is an issue which affects behavior. Low self-esteem is closely related to substance use/abuse, involvement in abusive relationships, and other self-destructive behaviors. Low self-esteem also makes continual application of safe sex practices difficult (California HIV Prevention Plan, 1995).

Sexism

The patriarchal basis of U.S. culture defines power distinctions along gender lines. Thus, women experience discrimination in all social arenas, including economic, political, and personal life. Just as discrimination presents barriers to self-development in general and self-protection in particular for other groups, it carries these issues for women's health development.

The female-male power imbalance has important implications, especially in heterosexual sexual relationships. Safe sex can be difficult, and requires communication and negotiation between partners. If there is either a perceived or actual power imbalance, it is likely that women will feel unable to insist that their male partners use condoms. This dynamic removes control over self-protection for women.

A study by Marin et al. (1996) of 1,600 randomly selected unmarried Latino adults in 10 U.S. states found a correlation between traditional gender role beliefs and decreased condom use. Specifically, "men who reported more sexual entitlement (comprised of traditional gender role beliefs and coercive sexual behavior) reported significantly lower levels of sexual comfort and lower self-efficacy in using condoms" (Marin et al., 1996). Among study respondents, greater efficacy to use condoms predicted more condom use, thus establishing the link between traditional gender role beliefs among these Latino men and lower rates of condom use. This implies that women in sexual relationships with Latino men who have traditional gender role beliefs are at higher risk of becoming HIV-infected through unprotected sexual intercourse.

Other issues may compound the difficulty many women experience in negotiating sex or condom use with their partners. Airhihenbuwa et al. (1992) explain that, regarding African

American women and the inability to negotiate condom use, “it is necessary to understand the larger context of the economic security, sex-ratio imbalance, and meaning of sex.”

Poor women may have additional barriers: “For an indigent African American woman, the role of sex may be seen as a barter in exchange for the financial support of a male partner. A woman may place more value on securing food and shelter for herself and children than on practicing safer sex” (Airhihenbuwa et al., 1992). “For poor women, sex may function as a source of employment, a method for establishing ownership or proprietary rights in a relationship, or as a means of acquiring much needed tangible or emotional support.” Under these circumstances, negotiating condom use may be ineffectual. (Mays and Cochran, 1988).

A small subset of women experience physical and verbal abuse in response to requests for their partners to use condoms (Mays and Cochran, 1988). “Moreover, negotiating condom use with a sexual partner often translates to promiscuity and is extremely pejorative. If a woman asks her male partner to use a condom, she is implying either that he has been immoral or that she has been immoral. If she implies that she has been sexually permissive, she may risk rejection from her male partner; if she implies that he has been sexually permissive, she risks his anger and outrage” (Airhihenbuwa et al., 1992).

The discussion above gives the impression that people are bound by culturally-based gender roles in their selection of partners, discussions of sex, and use of condoms. However, Kline et al. (1992) conducted extensive qualitative research among women in methadone programs and partners of IDUs and found that “their attitudes were typically not congruent with traditional gender role characterizations of the submissive, dependent, self-sacrificing woman. On the contrary, participants expressed a remarkable degree of independence in their relationships with men. This was reflected, in part, by their willingness to relinquish those relationships if they found them no longer satisfying or productive. In general, women were reluctant to maintain relationships with men who could not function as responsible partners or role models for their children” (Kline et al., 1992).

As explained by Herek et al. (1995), “in the history of the AIDS epidemic, cultural sexism has interacted with AIDS-related stigma to make women with AIDS one of the most invisible groups among PWAs in the United States.” The interaction of AIDS-related stigma and cultural sexism has had at least three important effects. First, official criteria for a diagnosis of AIDS have excluded many of the symptoms exhibited by women with HIV. Symptoms that might be specific to women, including cervical cancer, were not included in the official CDC definition of AIDS until 1993, precluding early detection and appropriate medical attention for women with AIDS.” Second, prevention and treatment programs that recognize women’s unique needs have been lacking. Third, women have been considered primarily as vectors of HIV rather than as persons with AIDS who need treatment. Public policy has reflected less concern about the well-being of women than the welfare of those who are likely to be infected by women as ‘vectors,’ namely, babies and heterosexual men.

Much of the public debate concerning women and AIDS has focused on issues such as mandatory testing of expectant mothers and prostitutes. Although many more women than

children have been infected with HIV, a disproportionate amount of the public policy and scientific literature about women and AIDS has focused on pediatric concerns. Given the dearth of information on women and AIDS in general, focus on such issues as mandatory testing of mothers and prostitutes sends women the message that they are dangerous vessels of infection, and that their privacy rights are not valued as highly as the protection of ‘potential victims’ (Herek et al., 1995). Focusing on women as vectors for HIV transmission detracts much needed attention from developing effective HIV prevention strategies to save women’s lives.

Ageism

Generally, ageism refers to any form of discrimination based on one’s age. Traditionally, people at the extremes of the age spectrum—young people and the elderly—are those who experience such discrimination. However, the focus here is on issues of discrimination that young people face, given that HIV risk behaviors are disproportionately seen among adolescents and young adults, as compared with the elderly.

For the most part, legal minors are systematically denied access to services without adult consent. This poses a serious barrier to their accessing HIV prevention information, materials, or testing services. Such laws, intended to “protect” young people from sexually explicit messages, backfire in the arena of HIV infection.

Many San Francisco youth learn about HIV prevention in school. While in-school HIV/AIDS prevention education is mandated by legislation, the fact remains that the specific form that education must take is not explicitly defined, nor is the length of school-based HIV prevention intervention sessions thought by many to be sufficient both to inculcate and to reinforce effective behavior-related messages. Furthermore, teachers require no specific training to deliver HIV/AIDS education. As explained by a Long Beach community member, “I did learn about AIDS in Health, but I learned more about the dangerous effects of not wearing a seat belt” (California HIV Prevention Plan, 1995).

In addition to these limitations, relying on schools to provide HIV/AIDS education misses out-of-school youth. Out-of school youth are very difficult to reach with prevention messages and must be accessed within the context of specific health or social service interventions, such as street outreach programs. The importance of such programs must be emphasized, as these youth are often at highest risk.

A primary barrier to successful HIV/AIDS education for youth is the exclusion of young people from the process of developing HIV/AIDS education materials. Additionally, youth peer educators are rarely employed to disseminate information and support. Many of the materials and programs geared towards youth are not responsive to the specific developmental needs of young people, or not knowledgeable or respectful of the specific vernacular of young people and of the ethnic, cultural, language, economic, sexual, and gender background of specific youth audiences (California HIV Prevention Plan, 1995).

Ableism

Discrimination based on physical and mental capability is evident throughout all social and political worlds. A “survival of the fittest” mentality validates exclusionary practices that deny the physically and developmentally disabled access to employment and other opportunities. Such treatment only adds to the difficulties that many disabled people experience in their day-to-day lives. Valuing the disabled’s unique perspective on life and coping is an important step in understanding their contribution to diversity.

Society’s ignorance of the disabled community is apparent in the dearth of empirical information concerning their health and needs. This lack is the key barrier to effective and comprehensive HIV prevention efforts on their behalf. Without sufficient, quality data regarding the heterogeneity of these communities, the overall complacency concerning their condition, and their risk for HIV infection in particular, is perpetuated.

A comprehensive HIV/AIDS prevention plan must include provisions for the special needs of disabled communities. For example, HIV prevention messages require special formatting to meet the needs of the deaf (Peinkofer, 1994) and blind, and innovative education programs must be designed for the developmentally disabled.

Substance Use

Discrimination against substance users is common in public policy and reflects generally held social norms. People who use substances are consistently seen as at fault for their use and addiction. This victim-blaming mentality taints the debate among policy-makers regarding whether substance users should be considered “disabled.” If substance use in general, and addiction in particular, were considered a disability, people with substance use addictions would be entitled to the same civil protections as others.

Discrimination based on substance use is institutionalized through policies such as the Reagan Administration’s “Drug Free Workplace” program. According to this policy, substance users are denied certain rights in the workplace by virtue of their use (Pappas, 1995). Similarly, discriminatory policy is evident in the resistance to needle exchange programs, despite documentation of their effectiveness as an HIV prevention strategy (Pappas, 1995). Community norms view outreach to drug users as a tacit approval or encouragement of substance use (California HIV Prevention Plan, 1995).

Criminalizing substance use fuels a cycle whereby users find themselves in increasingly difficult circumstances, with greater barriers to getting assistance. Problems with housing, medical care and employment can be traced to the criminalization of substance use and the denial of social services. Many people who have a legal record documenting a substance-related offense are repeatedly denied employment (Pappas, 1995).

Because of the discrimination and stigmatization that exists for drug users, many drug users feel mistrust of AIDS educators, are wary of law enforcement, and try to hide use from

family and friends. They may not self-identify as drug users and thus may not seek out the education and support they need to effect long-term behavior change to reduce HIV risk. Additionally, the prohibition on needle exchange programs may keep injection drug users from obtaining clean needles. All of these factors make it difficult for AIDS educators to contact and identify drug-using populations (California HIV Prevention Plan, 1995).

Significant barriers exist for HIV prevention when HIV outreach workers are not sensitive to the cultural and social milieus of the particular substance abuse community with which they are working, or when they do not understand that HIV and AIDS risk is only one factor in a complex range of problems facing injection drug users. As Lurie and Reingold (1993) explain, AIDS has most severely impacted disadvantaged segments of U.S. society, and lack of education and lack of financial resources make it more difficult to build the skills and self-confidence that injection drug users need to avoid HIV infection.

The “Multiplier Effect”

It is important to consider that discrimination does not occur in discrete categories, as described above. People who are members of more than one of the groups which traditionally experience discrimination face a “multiplier effect.” For example, African American women struggle with the double burden of racism and sexism, and a young gay Asian man grapples with racism, homophobia, and ageism. The multiplier effect requires HIV prevention services that are designed with the larger social context of people’s lives in mind.

Trends in Discrimination

The Public Media Center’s telephone survey of 73 prominent HIV/AIDS leaders and researchers questioned respondents about trends in discrimination among people with AIDS. These trends likely hold true for groups at risk for HIV infection, as well.

- Many respondents perceived the problem of anti-gay prejudice to be getting worse. Among segments of the population in which anti-gay prejudice has become socially unacceptable, it has not disappeared; instead, it has merely assumed new, more covert forms.
- Those with expertise on substance abuse and racial/ethnic HIV issues reported less progress in addressing the problems.
- Those with expertise on women’s HIV issues tended to feel that some progress had been made.
- Many respondents argued that problems have worsened for women of color. Respondents pointed to the pervasiveness of poverty, racism, and lack of access to health care within this population.
- Respondents indicated that HIV stigma and discrimination owing to racial bias have not decreased at all, and many long standing racial problems have, in fact, been fueled by the HIV epidemic (Public Media Center, 1995b).

Discrimination remains an issue that affects increasing numbers of people in the ever-diversifying world. Given that many communities disproportionately affected by HIV/AIDS are discriminated against in larger social contexts, providers in these communities must be aware of the economic, political, social, and personal effects of discrimination. Community and individual empowerment are necessary to counter these pervasive forces and maintain energies to intervene most effectively in the HIV prevention arena.

X. COMMITTEE PROCESSES AND TASKS

The final sections in this chapter describe the Epidemiology and Research Committee and its recommendations. Since one of the primary tasks of the Committee was to identify and set priorities for further research, the bulk of this section describes that process. Section XI, following this section, presents the recommendations for future studies formed by the Committee and adopted by the Council.

Committee Membership

When formed, the Committee comprised ten members: six Council members, one AIDS Office staff member, and three community members. During the year, some membership changes occurred, and by the end of the year the Committee had eleven members, of whom four were Council members, two were AIDS Office staff, and five were community members (making it the committee with the greatest participation of non-Council members). The Committee met 15 times during the year, and received support from logistical (e.g., notetaking, food) and evaluation (e.g., process, observation) consultants. Additionally, the technical support consultants and AIDS Office staff rendered extensive support to the committee, prepared reports, and wrote the Epidemiological Profile.

Committee Tasks

In the 1996 Goals and Objectives for the HPPC, two objectives were identified as tasks for the Epidemiology and Research Committee:

- to provide guidance to the consultants and the AIDS Office in the revision of the Epidemiological Profile of the HIV Prevention Plan; and
- to identify and prioritize behavioral research and epidemiological studies to address gaps in knowledge about behavioral transmission groups.

The first two meetings were an orientation to commonly used research terms and sources of information about AIDS and HIV. The committee reviewed the 1995 Epidemiological Profile presented in the previous edition of the San Francisco HIV Prevention Plan; Committee members critiqued the chapter, made many comments, and gave guidance for its revision. These comments were implemented by the technical support consultants and AIDS Office staff, and when the chapter was revised later in the year, Committee members again reviewed it and recommended final revisions.

During the year, the Committee received updates from AIDS Office staff about new research information that became available in San Francisco—prevalence, incidence, and behavioral studies (see Section VIII of this chapter). The Committee reviewed this information looking for gaps in research, since one of its primary tasks was to recommend priority research to fill such gaps. The Committee convened four panels of experts about populations for whom few, if any, studies exist.

Processes for Decision Making

The process used to complete the task of guiding the revision of the Epidemiological Profile was simple. Committee members read the 1995 Profile, discussed issues, gave verbal guidance, and critiqued the 1996 draft Profile.

The process used to prioritize future research studies was more complex, and is described below. The Committee recognized that there are groups of people for whom there are no available San Francisco HIV seroprevalence and/or HIV-related behavioral studies, and discussed ways to obtain information on under-researched populations. The committee decided that it would be valuable to hear, through key informant interviews, from people knowledgeable about those groups. The data collected in this manner constitute “weaker” data than that produced by a representative survey of the population. For this reason, interviews were not conducted with informants on the groups for which “stronger” data was already available. While the key informant interviews were not expected to yield quantitative data on under-researched populations, they were viewed as an opportunity to prepare the committee for the process of setting priorities for future San Francisco research and to prevent inadvertent oversight of groups of people at risk for HIV.

Key Informant Panels

The Committee developed a preliminary list of populations for whom little information was known, and reviewed what research was available in San Francisco for each group suggested. After assimilating this information, members voted, and devised the following list of populations for their own information-seeking effort:

- **Homeless Adults**
Several studies have been published with findings about homeless youth (including behavioral, prevalence, and counseling and testing). Fewer studies exist with findings about homeless adults in San Francisco. Zopola et al. conducted one of the few studies in San Francisco with a representative sample of homeless females and males recruited from shelters and food lines.
- **Immigrants**
No behavioral or prevalence studies of immigrants have been conducted in San Francisco. Locally, the only available data come from a Knowledge, Attitude, Beliefs,

and Behaviors (KABB) study by the Coalition for Immigrant and Refugee Rights and Services (CIRRS).

- **Bisexually-Behaving Women Not Associated with the Lesbian Community**

Several sources of data report on bisexual women, including recent AIDS case data, counseling and testing reports, a prevalence and risk behavioral study among lesbian and bisexual women conducted by the AIDS Office in 1993, a health behavior study among lesbian and bisexual women also conducted by the AIDS Office in 1993, and a study of female injection drug users who have sex with women. Typically, articles and reports do not disaggregate findings about FSF and FSF/M.

Most of the available research uses samples of women recruited from the lesbian and bisexual women's community and/or women's community venues. Data are unavailable about bisexually-behaving women whose social networks are outside of a lesbian community. The prevalence and/or risk behaviors of FSF/M who are outside of the traditional study samples of women who have sex with women (both FSF and FSF/M) may differ significantly from those reported in the available research on FSF and FSF/M.

- **Sex Workers—Female and Male**

A 1990 risk behavior study of street-recruited female sex workers by Dorfman et al. is one of the only studies that specifically focuses on this population; however, there are several sources of data (including a number of behavioral studies and counseling and testing data) which contain an item about whether participants have exchanged sex for money or drugs. It is often difficult to create clear distinctions between commercial sex, work, survival sex, and receiving favors for sex.

Five key informant panels were held: homeless adults, immigrants, bisexual women not identified with the lesbian community, male sex workers, and female sex workers. Each panel was made up of four to six key informants with extensive personal experience or professional knowledge of the population under discussion. Prior to the sessions, the interview questions of the committee were sent to panelists, so that they could prepare responses touching on the most critical points for prevention services and research. Panelists were asked about:

- any studies, articles, needs assessments, or reports about the population;
- suggestions for study design methods for the population;
- estimated prevalence of HIV in the population;
- risk behaviors of the population;
- co-factors common in the population; and
- barriers to prevention for the population.

The respondents found it impossible to estimate HIV prevalence and/or risk behavior frequencies for the populations, even relative to the other groups for whom prevalence and behavior frequencies have been estimated. However, the key informants were able to describe a

range of social and psychological co-factors associated with the populations, and to discuss the prevention needs and barriers to prevention that those populations experience. They also spoke about the contexts for risk behaviors practiced in their populations, and suggested additional articles, studies and personal contacts that could act as sources of further information.

Criteria for Prioritization

The greatest utility of the key informant panels and reports on in-progress studies was their contribution to the Committee's decision-making process regarding prioritization of future studies. In addition, members developed a set of criteria for each of the types of studies. The Committee was committed to developing a careful process for prioritization and adhering to and documenting that process so that it would be possible to verify that the research priorities did not simply emerge from the community ties of those on the Committee. This process contained several stages:

- Identify groups for whom little research has been conducted;
- Develop a set of criteria to determine which populations should be considered a priority for future research;
- Further cluster the research priorities into a few categories; and
- Recommend the two highest priority studies

Based on a review of the previous Epidemiological Profile, the key informant panels, the updates provided throughout the year about ongoing research, and their own experiences and knowledge of the field, Committee members developed a list of groups about which more research is needed. Next, members developed a set of criteria used to prioritize research for these groups. There are several types of studies that could be conducted for a population, and these studies can be thought of in a hierarchical paradigm—basic information must be obtained about a population before “advanced” information is sought. The criteria that the Committee developed for each type of study are presented below.

Formative Studies: These studies would be conducted for specified populations for whom basic risk behavior and prevalence information is not known. The criteria were:

- There is little information on this population.
- There is reason to believe that the population is at risk for HIV infection.
- Basic information needs to be gathered from the population before a behavioral prevalence or incidence study can be conducted.
- A study of this population is ethical and appropriate.
- The questions are best addressed using this type of study.

Basic Risk Behavior: These studies would be conducted to obtain information about risk behaviors within a specified population. Information about demographic characteristics of the sample would also be collected. The criteria were:

- There is no risk behavior data on the population.
- There is reason to believe that the population engages in high-risk behaviors.

- The population is definable according to HPPC behavior groups, co-variates, and/or co-factors.
- The population is accessible by research sampling methods.
- It is possible to obtain a large enough sample size for risk behavior comparisons.
- A study of this population is ethical and appropriate.
- A study of this population will inform prevention planning efforts.

Advanced Risk Behavior: These studies would be conducted for specified populations for which basic risk behavior information is known, but for which challenging prevention questions remain. The criteria were:

- There is basic risk behavior information for the population.
- Based on past research or theory, there is reason to believe that psychosocial factors are influencing behavior change; relapse, etc.
- The factors of interest are areas that could be addressed by prevention interventions.
- A study of this population is ethical and appropriate.
- A study of this population will inform prevention planning efforts.
- The questions are best addressed using this type of study.

Prevalence / Incidence: These studies would be conducted to obtain prevalence or incidence estimates within a given population. Information about risk behaviors and demographic characteristics of the sample would also be collected. The criteria were:

- There is no prevalence/incidence data for the population (or the data are based on a weak methodology).
- There is reason to believe that the population may be at elevated risk for HIV infection.
- The population is definable according to HPPC behavior groups, co-variates, and/or co-factors.
- The population is accessible by research sampling methods.
- It is possible to obtain a large enough sample size to detect prevalence.
- A study of this population is ethical and appropriate.
- A study of this population will inform prevention planning efforts.
- The questions are best addressed using using this type of study.

Together, Committee members applied each criterion to each identified group and recorded the responses. During the discussion, the committee also identified subgroups to be oversampled, or particular methods (such as street versus clinic recruitment of study participants) to recommend. The Committee identified the most suitable type of study for each population, based on knowledge of what research already been conducted. For example, if a basic behavioral study has been conducted with a population in San Francisco, then the Committee applied the criteria for an advanced risk behavior study to the group. Community input (contributed by guests at Committee meetings and through Committee members who had polled their constituencies) was incorporated into the process of proposing studies and applying the criteria.

Throughout the process of prioritization, committee members continued to ask themselves the larger question, “what information is needed to describe populations at risk for

HIV and to develop the best possible interventions?” They kept in mind the fundamental purpose of prevention research: to produce data that will assist in the design of effective prevention services.

XI. RECOMMENDATIONS

Recommendations for Future Studies

This prioritization is based on what is currently known, although additional information gained in the future may provide new insights. The prioritized studies fall into three groups: highest priority, high priority, and priority. Furthermore, two studies in the highest priority category were selected as the top priorities. These are: 1) a prevalence study of Asian and Pacific Islander men who have sex with men; and 2) a risk behavior study of African American men who have sex with men. Every effort should be made to obtain funding for these two top priority studies. Additionally, the AIDS Office should respond to opportunities (such as RFPs from Federal agencies) to fund any of the studies on this list. This list should be circulated and promoted throughout the City to other groups who engage in research to encourage them to undertake the studies on this list. The following three tables display the Committee’s recommendations for future research studies. The first two studies listed in the highest priority category are the top priorities. Other studies within each table are not in prioritized order within the table. The primary co-factor (if any) identified for the study is in capital letters; other co-factors identified are also important considerations for the study. Exhibits 3.73, 3.74, and 3.75 list a variety of studies by priority ranging from highest priority to lowest priority.

Exhibit 3.73
Highest Priority Studies

Description of Study	Type of Study	Behavioral Risk Group	Co-Variates	Co-Factors and Research Questions
*A prevalence study of Asian and Pacific Islander men who have sex with men.	* Prevalence	MSM-IDU; MSM/F-IDU; MSM; MSM/F	Asian and Pacific Islanders [oversample: Pac. Isl; youth]	Questions: acculturation, drug use, immigration, migration
*A study of African American men who have sex with men to learn why prevalence is so high among this group.	* Advanced Risk Behavior	MSM-IDU; MSM/F-IDU; MSM; MSM/F	African American	Question: Why is HIV prevalence so high among African American MSM despite similar reported behaviors?
A study of speed and poppers among men who have sex with men.	Advanced Risk Behavior	MSM-IDU; MSM/F-IDU; MSM; MSM/F	[over sample: < 26 years for speed; all ages for poppers]	SPEED, POPPERS Questions: migration, initiation, new arrival
A street-based prevalence study of homeless youth.	Prevalence (street based)	All behavior groups	age < 26 years old	HOMELESS, sex trade substance use
A formative study among migrant workers.	Formative Study	All behavior groups		MIGRANT WORKERS, immigration, migration

*These two studies are the highest priority. The remaining three studies in this table are not in order by priority.

Exhibit 3.74
High Priority Studies

Description of Study	Type of Study	Behavioral Risk Group	Co-Variates	Co-Factors and Research Questions
A basic risk behavior study among Native Americans.	Basic Risk Behavior	All behavior groups	Native Americans	
A prevalence study of Asian/Pacific Islander IDUs.	Prevalence	MSM-IDU; MSM/F-IDU; MSF-IDU; FSM-IDU; FSM/F-IDU; FSF/IDU	Asian and Pacific Islander [oversample: Pac. Isl; youth]	
A prevalence study among transgender groups.	Prevalence	Transgender persons of all behavior groups		
A study of risk behaviors among patrons of adult bookstores and public sex environments.	Basic Behavior	MSM-IDU; MSM/F-IDU; MSM; MSM/F		BOOKSTORES, PUBLIC SEX ENVIRONMENTS Questions: How behaviors vary in the PSE setting
A prevalence study of female sex workers.	Prevalence	FSM-IDU; FSM/F-IDU; FSM; FSM/F		SEX WORK, substance use /Question: risk behavior
A prevalence study of male sex workers.	Prevalence	MSM-IDU; MSM/F-IDU; MSM; MSM/F		SEX WORK, substance use/ Question: risk behavior
A prevalence study of female crack users.	Prevalence	FSM-IDU; FSM/F-IDU; FSF/IDU; FSM; FSM/F; FSF		CRACK USE Large sample
A prevalence study of low income women.	Prevalence	FSM-IDU; FSM/F-IDU; FSF/IDU; FSM; FSM/F; FSF	[oversample: women of color]	LOW INCOME

Studies within this table are not in order by priority.

Exhibit 3.75
Priority Studies

Description of Study	Type of Study	Behavioral Risk Group	Co-Variates	Co-Factors and Research Questions
A study among older men who have sex with men about relapse issues.	Advanced Risk Behavior	MSM-IDU; MSM/F-IDU; MSM; MSM/F	age> 35	RELAPSE Questions: Why do some men relapse and some not
A risk behavior study of runaway Asian youth.	Basic Risk Behavior	All behavior groups	age< 26 [oversample: <18 Asians]	RUNAWAY, sex work, drug use, gang involvement
A formative study among Eastern European/Russian immigrants	Formative Study	All behavior groups		Eastern European/Russian immigrants (1st & 2nd generation)
An incidence study among older gay men.	Incidence	MSM-IDU; MSM/F-IDU; MSM; MSM/F	age> 26 [oversample: 35+]	

Studies within this table are not in order by priority.

Obtaining HPPC Letters of Support for Research Studies

The recommendations regarding future research studies represent the Epidemiology and Research Committee's primary recommendations. However, the Committee was additionally requested to develop recommendations about the process which should be followed when groups in the community wish to obtain from the HPPC a letter to support an application or proposal for a research study. This issue arose mid-year when a few organizations made such requests before the Council; the Council approved the letters of support, but desired a process by which members could be assured of a more thorough review of the proposals and the issues surrounding them. The committee developed the following procedure, and the HPPC adopted it for use in 1997 and beyond.

- 1) The AIDS Office invites Council and Committee members to join an ad hoc advisory committee to review the proposal. The ad hoc committee is to consist of:
 - a) at least 1 Council member;
 - b) at least 1 person with research experience;
 - c) at least 1 person from the target population (or a provider of services to that population, if participation by a member of the target population is not possible);

The above three positions should be held by three different people.

- 2) The ad hoc advisory committee is invited to review the proposal, provide substantive comments, and present the study to the Council. Once the study has been presented to the Council, the ad hoc committee will be disbanded. Another ad hoc committee will be formed when another research project needs a letter of support. There needs to be sufficient time for the ad hoc committee to conduct this process; however, it is recognized that some applications have extremely short turn-around times.
- 3) The HPPC will receive, in advance, a written summary of the research study proposal prepared by the advisory committee, will hear a presentation by a member of the ad hoc committee, and will have an opportunity to discuss and vote on the issue.

XII. SUMMARY AND IMPLICATIONS

The Epidemiologic Profile for San Francisco contains a great deal of useful information about AIDS cases, HIV prevalence and incidence, risk behaviors, and co-factors. The Epidemiology and Research Committee of the HPPC guided the revisions of this Epidemiologic Profile throughout 1996. In addition, the Committee convened several panels of experts about at-risk populations for which few formal studies exist. Using information gained through the review of Epidemiologic information and the panels, the Committee established a priority list of studies.

Two studies were selected as top priority:

- 1) A prevalence study of Asian and Pacific Islander men who have sex with men; and
- 2) A behavioral study of African American men who have sex with men. (See Section XII for the complete list of priorities.)

Collecting, reviewing, and summarizing epidemiologic information was no less difficult for the 1996 Prevention Plan than for the original 1994 Plan. Collecting extensive epidemiologic information is a difficult and time-consuming task. The Epidemiology and Research Committee encourages the development of a process for continually collecting information from studies and disseminating the findings. The Committee urges that this be a task of the 1997 HPPC.

Researchers, governmental agencies, and HIV prevention providers in San Francisco can be proud of the quantity and quality of studies related to HIV prevention. From these studies, a great deal of relevant information exists about populations at risk for HIV. Not only are reliable AIDS case data available for recent cases in a format suitable for planning in the City, but also a host of studies about prevalence and behavioral risk studies have been completed and the findings disseminated. More studies are in progress.

San Francisco researchers and prevention providers have a unique decade-long history of working together to gain knowledge about those at risk for HIV. It is common to find outreach workers, program managers, and executive directors of AIDS agencies familiar with the method and language of research. It is also common to find researchers who are sensitive to the conditions and concerns of the groups they study. In fact, the typical research study in the City involves people from the community in the formation of the study design and the recruitment of participants for the study. From this pattern of collaboration, a research-wise provider community and a street-wise research community has arisen.

The partnership between research and prevention has grown even stronger through recent funding initiatives and policies. The Northern California Grantmakers has funded several research/community-based organization collaborations which appear to be successful. Furthermore, the HPPC encourages continued prevention provider involvement in research studies through its policy of requiring an annual risk behavior assessment (see Chapter 9). The HPPC also encourages researchers to increase their sensitivity to and understanding of at-risk communities through its process of approving letters of support and encouraging researchers to form advisory committees that include people from affected or targeted communities.

These innovations will continue to keep San Francisco on the cutting edge of HIV prevention advancements. As more is known about the complex dynamics that result in new infections, providers will continue to create new and even more effective interventions specifically tailored to the needs of those they serve. In this way, the primary goal of the HPPC—to reduce new HIV infections to as close to zero as possible—will be achieved.

CHAPTER 4 - STRATEGIES AND INTERVENTIONS

I. INTRODUCTION

The intent of the HIV Prevention Planning Council's planning effort was to identify, succinctly define, and make recommendations for the implementation of priority HIV prevention strategies and interventions that are believed to be effective. This information is presented with the explicit understanding that it is a guide and a resource, not a mandate, for prevention planning and program design.

This chapter presents strategies and interventions in discrete categories for the sake of clarity in discussion; they are not meant to suggest that in practice these interventions fit into strictly bounded categories. The Council recognizes the complementary nature of these strategies and interventions in the development of comprehensive prevention programs, as successful programs generally employ several strategies and interventions to effectively serve the target populations.

The Committee and the Decision-Making Process

This chapter was developed during 1995 by the Strategies and Interventions Committee. The Committee was formed to develop an inventory of priority strategies and interventions and describe cross-cutting themes. This chapter is a result of the Committee's work, and provides a set of guidelines for the implementation of HIV prevention strategies and interventions. The Council adopted this chapter at the end of 1995, at which time the Strategies and Interventions Committee disbanded.

The Committee consisted of HPPC members, AIDS Office staff persons, and community members, and received support from technical and logistical consultants. The development of each section of this chapter required Committee members to make decisions about the kind of information that would be most useful to the community and how to present it. The structure of the document, as well as all aspects of its content, was discussed and decided upon by Committee members present at meetings. In general, decisions were made using a nominal group process, which involved open discussion and group consensus.

Data for this chapter were gathered from the following sources:

- Results from 1994 focus groups with members of target populations;
- Community meetings;
- Reports from prevention providers in interviews, discussions, and written reports;
- Relevant published research literature;
- Key informant interviews;
- Group interviews and discussions among HPPC members; and
- The California State HIV Prevention Plan.

What is in this Chapter

This chapter begins with crosscutting themes and general recommendations for the planning, design, and implementation of prevention programs. Next is a discussion of behavior theory and its application and value to HIV prevention efforts. Each of the strategies and interventions is then discussed individually, with specific guidelines and recommendations outlined in detail.

General Recommendations/Crosscutting Themes

The Committee decided to include a section outlining a number of general recommendations for providers. For example, conducting needs assessments, incorporating evaluation in program designs, and using volunteers should be considered with any prevention strategy or intervention. It was the Committee's decision to expand the chapter's introduction to highlight those overarching themes that have broad applicability to prevention programs in general. These topics are presented as general recommendations for all strategies and interventions.

Behavior Theory and HIV Prevention

An additional section describing applicable behavior theories and their use in HIV prevention is also included. The section operates as information and guidance for providers developing programs.

Information on Individual Strategies and Interventions

The Committee chose to make a distinction between prevention "strategies" and prevention "interventions." A strategy is an approach to prevention that can be applied across a spectrum of possible interventions (such as peer education). Interventions are defined as the type of service a prevention program provides (e.g., individual sessions, outreach, educational workshops). Strategies are discussed separately from interventions in the chapter.

In keeping with its goal of creating a useful tool for prevention providers, the Committee developed a format for describing the strategies and interventions. For each strategy and intervention, the guidelines present a definition and description to establish a common language for prevention. Committee members also identified a set of standards of service delivery for each intervention that would ensure consistent quality of prevention services. Expected impacts for each intervention were also discussed and are outlined in the chapter. Information on effectiveness, based on the literature, is also presented, including outcome and when available, cost-effectiveness. The final component for each strategy and intervention is a list of guidelines for suggested uses.

The "Suggested Uses" section is a result of the final task of the Committee, which was to prioritize the prevention strategies and interventions for specific target populations. In discussing a process for accomplishing this, it became clear that establishing a priority listing of

interventions would not be as useful for providers as would an outline of suggested uses of and considerations for each strategy and intervention. Through group discussion, Committee members developed guidelines for suggested uses that describe the characteristics of those for whom a particular strategy or intervention would be appropriate. The Committee primarily considered specific characteristics such as financial stability, perception of risk, and lack of social support. Many of the characteristics used by the Committee in its discussions are also co-factors that are described in the Epidemiologic Profile (Chapter 3). Along with the suggested uses are special considerations, limitations, or modifications to the intervention that would be necessary when targeting populations with certain characteristics.

The decision to present suggested uses and limitations of each strategy and intervention is in line with the goal to provide guidance to the community and to not discourage the innovative use of certain strategies and interventions. The Committee felt it was more important to focus on the standards of service provision and expected impacts. As a result, the descriptions of strategies and interventions are deliberately broad to allow maximum flexibility and creativity on the part of providers to tailor their prevention efforts in the most effective way for the community they reach.

II GENERAL RECOMMENDATIONS

In developing guidelines for the strategies and interventions outlined in this chapter, several themes emerged that cut across all types of strategies and interventions. For this reason, a set of general recommendations for program design, implementation and evaluation was developed that applies to all HIV education and prevention providers. The themes addressed in this section are: multiple approaches, needs assessment, program design, evaluation, linkages and coordination, training, volunteer use, prevention messages, confidentiality, and feedback/grievance procedures.

Multiple Approaches

HIV prevention strategies and interventions are more likely to reach target populations if a variety of approaches are employed. Therefore providers need to strive toward implementing a combination of several methods or to work closely with other programs targeting similar communities to insure that the multiple needs and issues of the target population are addressed.

Needs Assessment

An assessment of the needs of the targeted population/community is the first step in designing a prevention program that addresses the relevant HIV-related issues of that group. One purpose of looking into these needs is to identify the degree of risk for HIV faced by a particular community at a particular time. The target population also must be examined to understand its specific HIV needs. Do they lack knowledge? Do they need behavior modification skills? What are barriers to HIV prevention for this population and how can they be overcome? The knowledge gained from the needs assessment is used to define the prevention program. The needs assessment allows the provider to define its target group and state the

problem in behavioral terms. A description of the current services (or gaps in services) targeting this group can also be included. The target population must be allowed a proactive role in this assessment.

A needs assessment is also important to gauge commitment and timing requirements for the intervention to reach its audience, and to measure the feasibility of a proposed intervention within political and contextual constraints. In addition, needs assessments should bring to light the most effective venues and media for prevention work, the conditions of client participation, the levels of need and interest in the community for different intervention types, and the kinds of cultural/linguistic competence and organizational capacity necessary for an intervention to take hold. For example, all services should be provided in the appropriate language(s) and at the appropriate literacy and developmental levels of the target population. In addition, the hours that services are provided need to be flexible to accommodate the needs of the target population.

Program Design

The San Francisco STD/HIV Prevention Training Center (1995) outlines the steps for planning HIV prevention programs in its training manual, *Planning and Evaluating HIV Health Education Programs*. Program design begins with the needs assessment as described above, first to define the problem and then to define the program to address these needs. The actual plan for the program is outlined in its objectives. A program's objectives describe specific activities to be carried out by staff (process objectives) and expected changes that will result because of the intervention (outcome objectives). Objectives always consist of statements identifying the who, the what, the when, and by how much. Interventions are selected that are reflective of the needs assessment and are feasible given the resources available, and a plan to implement the program is designed. The final piece is the design of evaluation plan.

Evaluation

Ongoing evaluation processes determine whether the program's objectives are being met and the expected impacts of the intervention are being fulfilled. For this reason, organized evaluations are critical to the continuation and development of effective programs. Documentation of work, data collection, data analysis, and regular reports are among the tasks that must be built into program structure to demonstrate that a program is meeting its objectives, to assure quality services are being delivered, and to justify continuation. Appropriate staff time and expertise should be allocated to evaluation activities. The integration of evaluation tools into program structure may save a program that is failing to meet its expected impacts, through early diagnosis of problems, which may then be fixed. The completion of evaluation tasks allows program directors to document successful programs and to identify areas that need to be modified to better serve the target population. When appropriate, evaluations should incorporate client input (from an exit interview or an evaluation form filled out after a session, for example).

Linkages and Coordination

Prevention programs should share the larger goal of creating a coordinated system of referral to other social services. HIV prevention can be just one component of a set of services addressing multiple issues relevant to the community. Coordination of services enables clients to access information, especially about HIV prevention, that they might not otherwise receive. It can also be an excellent way for providers to outreach to clients at risk. A preliminary list of social services to prioritize for coordination with prevention includes: substance abuse treatment, immigration services, legal services, general assistance, mental health and primary health care services, shelters for homeless, shelters for battered women and children, rape crisis counseling, child protective services, suicide prevention, job training and placement, youth and runaway services, family planning, STD care and prevention, and services for people with physical, emotional, and/or learning disabilities. Chapter 8, Linkages and Coordination, outlines expanded recommendations for referrals and linkages.

Service Delivery Training

Training is an essential element of any prevention program and should be incorporated into both proposals and contracts. Funding should be available for trainings and conferences, including travel and per diem, as part of quality assurance for prevention services. Without adequate training, both clients and staff are at risk for misinformation and, worse, for personal injury. Training should be available for and provided to volunteers, peer educators, and paid staff. Scheduling constraints should be respected for volunteers and peer educators, who often have to balance their program work with other jobs or with school. For example, it may be necessary to hold some training sessions during the evenings and/or weekends, to meet the needs of volunteers and peer educators.

Volunteers

Volunteers need to be offered training and support opportunities similar to those available to regular staff. The expectations an agency has for its volunteers should be clearly delineated at the outset of the training. Volunteers should be made aware of the rules and regulations applying to all personnel, in addition to what is required in terms of HIV education and prevention. Volunteers should be well-supervised for consistent quality control within the agency.

The needs of volunteers as recipients of education and prevention should also be considered and met with appropriate services. For example, volunteer safety in street outreach situations should be protected through the use of outreach pairs or teams, or through some other mechanism for supervision. The possible health hazards of the job should be seriously addressed for volunteers who do not have health insurance. Similarly, financial assistance should be considered for any required inoculation, blood testing, and/or stick testing (TB test) of volunteers without health insurance.

Since the volunteer does not have the incentive of pay, other ties and loyalties to the work and the agency should be built and reinforced. Incentives should be considered as a possibility for recruitment and retention of volunteers. Prevention events and services provided to the community at risk can also be considered as possible sites/opportunities for volunteer recruitment.

Prevention Messages

Prevention messages should be concise, relevant, and appropriate to the target population(s). It is important that messages address the target audience member in her/his sociocultural context with recognition of the whole person and her/his complex realm of interests, needs, and concerns. Prevention messages should raise awareness that HIV does not exist in a vacuum. Some issues that can be productively linked to HIV in prevention messages are: STDs, substance abuse, racism, sexism, homophobia, biphobia, transphobia, immigration, poverty, homelessness, unemployment, youth issues, domestic violence, pregnancy and contraception, health care, mental health stressors, survival sex, rape, suicide, and access to social services. Designing prevention messages in collaboration with members of the target audience is an effective way to address these kinds of issues with appropriate language and sense of context.

Providers also need to keep in mind the intent of prevention interventions: **to effect changes in behaviors that put people at risk for HIV**. Providing information and education is only the first step in HIV prevention. Building skills and creating social norms for adopting healthy behaviors are critical when focusing on behavior change. To effectively promote behavior change, providers need to be aware of and address the risk behaviors of their target populations. The community needs assessment can inform program planners about where to focus these efforts. Approaches used should be interactive; activities such as role plays help individuals develop a sense of self-efficacy in adopting health promoting behaviors.

Confidentiality

Rules of confidentiality should be appropriate to the intervention provided. Different types of interventions present different requirements for how confidentiality should be handled. For instance, in group settings, participants and facilitators can set ground rules that address issues for disclosure of personal information. In all cases, California reporting requirements must be adhered to.

Any and all personal information that is disclosed one-on-one to an outreach worker, peer educator, prevention case manager, or other personnel in the context of an intervention or an intake should be kept strictly confidential by the program representative. While the general issues that come up in the course of a counseling session or outreach interaction can be documented and discussed with supervisors or other members of an intervention team, they should not be detailed in such a way as to allow recognition of the particular client by sight or by full name without prior approval by the client. Peer educators must be trained and prepared for

the transition from the usual social interactions with their peers to the bounded relationship required for successful and ethical prevention work.

Maintenance of confidentiality is especially important in providing services to adolescents, who may require assurances of confidentiality before agreeing to trust or receive assistance from providers. It is imperative that program staff and volunteers know the confidentiality law applying to youth and the services they offer, as well as the protocol for handling confidentiality in their agencies. Program rules and legal regulations about confidentiality should be explained clearly to all youth seeking or receiving services. Minors are entitled to confidentiality with respect to any services for which they are legally able to give their own consent (from “A Note on Confidentiality, Asian AIDS Project, San Francisco”).

Feedback and Grievance Procedures

All prevention providers should formulate, express in writing, and implement feedback and grievance procedures. Feedback is essential to the continued development of interventions and programs, as well as monitoring effectiveness. It is important to encourage continuous input from clients and volunteers about their perceptions of the sensitivity of the host agency to its target populations. Formal grievance procedures should also be made available.

III BEHAVIOR THEORY AND HIV PREVENTION

Introduction

Behavior theory can be a helpful tool for HIV prevention program planners. Many evaluations of HIV interventions demonstrate that those based on sound theoretical models are the most effective at encouraging behavior change (Fisher and Fisher, 1992; Holtgrave et al., 1995; Valdiserri, 1992). Program planners and service providers are skilled at incorporating informal theories, based on their experience and sensibilities, about what works to effect behavior change with the populations they serve.

A number of formal theories have proven useful through experience and are summarized in the literature. Formal behavior theories can help service providers understand the various components of behavior and the steps that commonly lead to behavior change. Also, behavior theory can be used to disentangle the complexities behind the behaviors providers target in their prevention program. These benefits can facilitate determining the design and goals of an HIV intervention. Thus, using theories can help improve the overall quality of interventions and conserve limited resources (University of California, San Francisco, 1995).

While useful, behavior theory is not the sole determinant of a successful HIV intervention program. Rather, behavior theory best enhances HIV program planning when it is a component of a process that involves: 1) assessing the risk behaviors and co-factors of the targeted population, 2) considering the strengths and weaknesses of potential HIV interventions and choosing those that best address the needs of the targeted population, and 3) working from

an awareness of the organizational, community, and cultural context in which HIV occurs (McLeroy et al., 1993).

The most commonly used health education behavior theories are:

- Health Belief Model (Janz and Becker, 1984)
- Social Cognitive Theory (Bandura, 1977)
- AIDS Risk Reduction Model (Catania, Kegeles, and Coates, 1990)
- Stages of Behavior Change (Prochaska and DiClemente, 1983)
- Theory of Reasoned Action (Ajzen and Fishbein, 1980)
- Empowerment Theory (Wallerstein and Bernstein, 1988)
- Social Networks/Social Support (Minkler, 1985)
- Diffusion of Innovations (Rogers, 1983)
- Social Marketing Theory (McQueen, 1991)

This section discusses each of the above behavior theories. We will outline each behavior theory generally, discuss its application to HIV prevention, and summarize what is known about its effectiveness.

Health Belief Model

Overview and Application to HIV Intervention

The Health Belief Model (HBM) is one of the most widely accepted theoretical models of behavior change. This theory maintains that three factors are necessary for health-related behavior change to occur:

- People are motivated to/toward behavior change when they believe they are susceptible to the disease (“perceived susceptibility”) and that the disease generally has serious consequences (“perceived severity”);
- People must believe that the disease poses an actual threat to their personal health and well-being (“perceived threat”); and
- People must believe that following a prescribed set of behaviors and/or adjustments will reduce the threat and that the benefit will outweigh the effort of the adjustment (Rosenstock, 1988).

Additionally, the model suggests that a specific stimulus, or “cue to action,” is often required to trigger the behavior change process (Petosa and Jackson, 1991). Examples of cues to action include media messages, warnings from medical professionals, the illness of a friend or family member, and other health education interventions.

Petosa and Jackson (1991) describe the HBM’s applicability to HIV intervention. They posit that safer sex intentions are influenced by “personal beliefs regarding susceptibility to AIDS, the health consequences of AIDS, and the effectiveness of safer sex practices in reducing

susceptibility.” According to the HBM, people need to believe in the benefits of and have the ability to engage in safer sex. For example, a woman who distrusts condoms and has a partner who objects to using them is unlikely to adopt condom use behaviors. The HBM calls for providers to increase people’s perceptions of their risk, increase their knowledge about the effects of HIV infection, increase their willingness to protect themselves, and reduce barriers to self-protecting behaviors.

Effectiveness of the Health Belief Model

Evaluation research of HIV intervention programs based on the HBM generally support its usefulness as a behavior change model. By using the HBM, a service provider can separately target the beliefs necessary for behavior change (e.g., personal susceptibility, self-efficacy, benefits) and barriers to prevention (Abraham and Sheeran, 1994). The HBM can be used to design interventions to change behavior regardless of the target population’s demographic characteristics so long as the intervention components are culturally appropriate (Abraham and Sheeran, 1994).

Deficits of the HBM have also been identified. Its focus on health attitudes and beliefs is useful for providing focus for educational efforts but does not take into account other aspects of people’s lives that are determinants of behavior change such as previous sexual behavior and other psychosocial factors (McCusker et al., 1989; Siegel et al., 1992; Abraham et al., in press). Furthermore, the HBM relies heavily on the presence of cues to action (prevention interventions) in people’s environments. This necessitates extensive and diverse interventions for targeted communities. Also, since the HBM works to change attitudes and beliefs, it has limited effectiveness in changing habitual behavior or addictions which have more intense biopsychosocial underpinnings. For example, the HIV risk associated with addictive IDU behavior may only be minimally affected by programs modeled on the HBM.

Social Cognitive Theory

Overview and Application to HIV Intervention

Bandura’s Social Cognitive Theory (SCT)—formerly known as Social Learning Theory—emphasizes a reciprocal interaction of behavior, social, and physical factors. The SCT maintains that a change in any one of the three (behavior, social, and physical) factors influences the others. The two primary forces that affect change in these three factors are what Bandura calls “expectancies” and “incentives.”

The SCT concept of *expectancies* is very similar to the HBM’s focus on one’s *perception* of disease susceptibility, threat and severity. Our expectancies are what we believe will happen in a given situation or what the relationship is between two events, based on personal experiences, the information we have, and other factors such as cultural norms and beliefs. For the purposes of the SCT, people’s beliefs about the following three areas specifically affects behavior change:

- environmental factors, such as beliefs about the general cause-effect relationship between behavior and health;
- the consequences of personal actions, or the “outcome expectation,” especially in terms of how individual behavior will influence one’s own health; and
- personal competence, or “self-efficacy,” referring to one’s ability to perform a given behavior.

Whereas expectancies are individual beliefs and internal factors, *incentives* are reactions from the external world regarding behavior and behavior change. The SCT suggests that incentives, as external reactions that reinforce healthy behaviors, reflect the community values behind health beliefs and actions. For example, a community that positively values health because it promotes longevity and well-being is more likely to positively reinforce health-promoting and health maintenance behaviors (Rosenstock et al., 1988).

SCT concepts can be applied to HIV prevention intervention. According to the SCT, people are more likely to engage in safer sex and/or drug use behaviors when:

- There is an incentive to do so—such as a strong value on healthy living without the complications of a chronic, life-threatening illness;
- They believe that there is a relationship between behavior change and decreased HIV risk (environmental expectancy)—such as beliefs that current unsafe sex and/or drug use behaviors are threats to one’s health or some other valued characteristic (e.g., appearance, mobility, etc.);
- They believe that by changing their own behavior they can reduce their personal risk (outcome expectancy)—such as beliefs that modifications to current unsafe sex and/or drug use behaviors will reduce the threat that HIV infection may pose to them; and
- They have the personal ability to make the necessary behavior changes (self-efficacy)—such as the individual’s perception that they are personally capable of adopting condom and safer needle use behaviors.

Effectiveness of Social Cognitive Theory

Evaluation of many HIV prevention interventions that employ SCT concepts have documented its usefulness as a model for program design (O’Leary et al., 1992). In particular, perceived self-efficacy in negotiating condom use with partners has proved a strong predictor of sexual behavior change among gay men (Emmons et al., 1986; McKusick et al., 1990), adolescents (Hingson et al., 1990), and college students (Basen-Engquist, 1994). Influencing social outcome expectancies to heighten positive social norms for safer sex and drug use likewise has been shown to affect HIV risk-taking behavior (O’Leary et al., 1992).

While useful for identifying psychological and environmental factors that may affect behavior change, the SCT remains focused on the individual. For example, it does not suggest work to change group or community norms. This focus limits the extent to which broad-ranging effects on the HIV epidemic can occur. Additionally, the complex biopsychosocial components

of addictive and other profound psychological issues—known risk factors for HIV infection—are less easily addressed by the SCT.

AIDS Risk Reduction Model

Overview and Application to HIV Intervention

Catania et al.'s (1990) AIDS Risk Reduction Model (ARRM) is a behavior change model which has emerged specifically from HIV prevention work. The ARRM is a three-stage model for understanding behavior change:

- The first stage, *labeling*, means that a person must consciously identify a behavior as risky before they will consider any change;
- The second stage, *commitment*, proposes that people must commit to a particular behavior change in order to carry out that change; and
- The third stage, *enactment*, consists of taking action to remove or reduce any barriers to the desired change and then actually making the change.

Although presented as sequential stages, people may move among stages in any order. Factors that may influence movement among stages include personal anxieties and social norms.

For HIV prevention, the ARRM calls for service providers to increase awareness among members of the targeted population about their risk for HIV infection, emphasize commitment to safer sex and/or drug use behavior change, and help remove barriers to the behavior change so that the targeted population can actually make the change. Increasing awareness of risk implies the need for HIV education specific to targeted groups. Emphasizing commitment requires consistent messages and support for safer sex and drug use behaviors. HIV prevention service providers can reduce barriers to safer sex and needle use behaviors by providing materials (e.g., condoms and bleach and water) and working on negotiation skills.

Effectiveness of AIDS Risk Reduction Model

Catania et al. (1994) evaluated the usefulness of the ARRM as a model in a study that examined determinants of condom use among heterosexuals. Generally, they found evidence that links the three stages of the ARRM—for example, labeling behavior as risky was linked to commitment to use condoms—and conclude that it can be an accurate model for understanding the behavior change process. Additionally, their results show that other factors, such as personal beliefs and social norms, are important determinants of whether people will achieve the goals of the individual stages and whether they will move from one stage to the next.

Stages Of Behavior Change Model

Overview and Application to HIV Intervention

Prochaska and DiClemente's (1983) Stages of Behavior Change Model considers the dynamic aspects of human behavior and suggests that different people may be at different stages with respect to changing any particular behavior. This differentiation is the primary value of the model because service providers and researchers can assess where an individual or group is at in relation to making a behavior change and then target an intervention accordingly to move people from one stage to the next. This model proposes that behavior change occurs according to a process of successive stages:

- *precontemplation*, before a person is aware of the negative effects of a particular behavior;
- *contemplation*, after a person has become aware of the hazards of the behavior, but is not yet certain about whether the necessary change is worth the effort;
- *preparation* occurs once a person has decided to make the behavior change and is getting ready to do so;
- taking *action* marks the accomplishment of the behavior change; and
- *maintenance* is the achievement of consistency in enacting the new behavior.

An HIV prevention intervention for a person or group in the precontemplation stage requires raising awareness of susceptibility and the consequences involved with HIV risk behaviors. HIV prevention at the contemplation phase includes skills training (e.g., condom negotiation, proper needle cleaning procedures) and self-efficacy building to minimize barriers and strengthen one's belief in their capabilities. People preparing for a behavior change need support and encouragement. Given that relapse is common, interventions for individuals at the action and maintenance stages focus on reinforcement of the behavior and other relapse prevention methods (Valdiserri, 1992).

Effectiveness of Stages of Behavior Change Model

Although few HIV prevention projects based on this model have been formally evaluated, preliminary results suggest strong support for its effectiveness. The primary strengths of this model are its basis in an understanding that behavior change is dynamic, the recognition of environmental and social norm influences on behavior, and the acknowledgment of relapse. These components, as well as the individual stages, foster diverse approaches to HIV prevention strategies based on age, gender, race/ethnicity, socioeconomic status and other factors (Valdiserri, 1992). Such specificity calls to attention the importance of assessment, since the current attitudes and circumstances of the individual or group must first be known in order to prescribe the most appropriate intervention.

Because potential target populations may have members at different stages between precontemplation and maintenance, providers need to target only the members at a particular stage, or simultaneously design a program that can work with these different stages. This poses

practical issues for its application to HIV prevention work. The different types of interventions that may be required, given differences in the stages of individuals in a community, may require a range of service providers and service settings. Valdiserri asserts that collaborations among multiple service organizations are necessary to implement this model in a community. He further states that because people must follow through various stages, it may be difficult for a single public health agency to track the progression of diverse communities. He concludes that public health departments may do well to assign intervention responsibilities to community-based organizations which are typically geared toward and thus better equipped for serving particular target groups.

Theory Of Reasoned Action

Overview and Application to HIV Intervention

Ajzen and Fishbein's (1980) Theory of Reasoned Action (TRA) focuses on the translation of beliefs about a behavior and perceptions regarding threat to self into behavior change (Abraham et al., 1994). While other behavior theories target the individual, components of the TRA incorporate the social and interactional aspects of human behavior. This is particularly useful for intervening with sexual behavior which is inherently social in nature (de Wit et al., 1994).

The TRA emphasizes attitudes, subjective norms, and intentions. Attitudes are individually determined and reflect beliefs about consequences associated with performing a behavior and evaluations of those consequences. Subjective norms are socially determined, typically by peers' and role models' perceptions of what one should do with regard to a specific behavior (Jemmott and Jemmott, 1991). Intentions to change a particular behavior are determined by one's personal attitude and the subjective norm toward that behavior. Behavior, according to the TRA, is ultimately a direct result of intentions.

An HIV prevention program based on the TRA addresses attitudes and subjective norms in order to influence people's intentions to change their behavior. For example, HIV-related attitudes that might be targeted include beliefs about whether condom use will prevent HIV and whether condom use with one's main partner will be perceived as an act of mistrust. Continuing with this example, an HIV prevention program would aim to change the entire group norm if it was known that a particular community commonly practiced unprotected sex with primary partners because of strong values linking condom use to partner mistrust.

Effectiveness of Theory of Reasoned Action

The TRA has been shown to provide an important link between health beliefs and behavior change actions. Its expansion upon other theories to include social and interactional aspects of behavior is an important strength. Components of the TRA have proven important predictors of safer sex behaviors. Specifically, studies have shown that attitudes towards condoms are predictive of intentions to use them, perceived norms are predictors of HIV-preventive intentions and behaviors, and perceived condom use norms are predictive of

adolescents' intentions to use condoms (Abraham et al., 1994). The TRA focus on attitudes and subjective norms suggests HIV interventions on the community level to influence perceptions of target groups.

As with other theories, the TRA does not provide a rounded perspective for behavior change. Its focus on attitudes and intentions, while predictive of some behaviors, does not address the dynamic nature of human behavior and particularly neglects issues of relapse and behavior maintenance. Additionally, larger social and environmental issues are not highlighted as influences on norms and behaviors.

Empowerment Theory

Overview and Application to HIV Intervention

Empowerment Theory is based on Paulo Freire's ideas of Popular Education. According to Freire, bringing groups of people together to discuss problems and jointly propose solutions can engender a sense of empowerment on the individual, community, and population levels (Wallerstein, 1992). Given that research has documented the link between a person's lack of sense of control over their own circumstances and illness, Empowerment Theory employs the ideas of Popular Education and seeks to promote health by enhancing people's feelings of power and sense of control (Wallerstein and Bernstein, 1988).

Given that, according to Empowerment Theory, the community's own perspective and desires are central, an HIV prevention program designed from this model must emerge from the community for which it is being developed. Focus groups with key informants are recommended to gather such information from the community. The program planner facilitates this process by assisting community members to develop their own curriculum, providing direction and awareness regarding HIV prevention as necessary while remaining non-judgmental and non-dictatorial. The program planners' primary responsibilities to the community are to listen, participate in dialogue regarding HIV information, and provide support for realizing the community's goals and objectives (Wallerstein and Bernstein, 1988). This may include tangible assistance such as providing community groups with a meeting space, access to clerical support, and funding for the projects and services they determine are needed to realize their goals.

Effectiveness of Empowerment Theory

Given that we found no documented interventions based on Empowerment Theory in the literature, it appears that little is formally known about its effectiveness. However, given its applicability to increasing self-esteem and providing support, it can be extrapolated to have at least a certain degree of success. As with theory in general, though, it is recommended that Empowerment Theory be considered as one of several components of a strong HIV intervention program.

Social Networks/Social Support Theory

Overview and Application to HIV Intervention

Social networks and social support theories are based on the concept that social ties improve health and well-being (Minkler, 1985). While it is difficult to measure their effect precisely, social ties are known to serve various functions that have been linked to better health, including decreased involvement in HIV risk behaviors (Muhlenkamp and Sayles, 1986; Nyamathi, 1991). These functions include providing a sense of belonging, opportunities for nurturance, reassurance of worth, assistance with acquiring needed goods or services, guidance and advice in uncertain or adverse circumstances, and access to new and diverse information (Berkman, 1984).

Social networks and social support are related, though distinct, concepts. Social networks are the chains of social ties that link an individual to others. Social network theory proposes that an individual's and group's behavior can be better understood through examining the form and characteristics of their social ties. There are several components that determine variability among social networks and their importance to health outcomes:

- density and complexity, or the degree of intimacy and communication among members of a network;
- size, or the number of people in a network;
- equality, or the degree to which supports and obligations are shared among members;
- geography, or how close to each other network members live;
- homogeneity, or the degree of demographic similarity among network members; and
- accessibility, or the ability of network members to contact each other (Berkman, 1984).

Studies have shown that the existence of a social network is not sufficient to positively influence health, particularly HIV risk behavior. For example, the social networks of many injection drug users are composed of other injection drug users who may not encourage safe or healthy behaviors.

In comparison, social support is comprised of the positive emotional and practical products that people derive from their social networks. Social support entails an exchange between people that can either be unidirectional or mutual, depending on the needs and resources of those involved. In these transactions, emotional support, financial or other practical assistance, information, and/or advice and counseling may be exchanged (Berkman, 1984).

Application of social networks and social support theories to HIV prevention interventions requires the transfer of support through caring exchanges so that an individual's sense of belonging and feelings of worth are improved (Pilisuk and Minkler, 1985). Many current community-based programs such as street outreach, case management and group/individual counseling to underserved and at-risk groups already accomplish the goals of social support theory. Providing people with empathic listening, or links to nurturing social ties, is an HIV prevention intervention similar to that of empowerment. Increasing a person's sense

of belonging and feeling of worth through the provision of social support is believed to not only decrease general susceptibility to illness but also to augment one's belief that they are capable of changing behaviors that put them at risk for HIV infection (Berkman, 1984).

Service providers can also link people to social contacts (e.g., through peer or other HIV education groups) which may become new sources of advice, services and information for them. Given that peer norms are powerful behavior motivators, and that many people—particularly marginalized groups—most readily trust peers for good information, peer HIV education groups are often successful HIV prevention interventions. HIV prevention service providers can also identify whether a person's primary social network and source of social support positively influences their HIV risk behavior. If not, they can offer long-term alternatives (e.g., residential drug treatment for a person who wishes to change that behavior but is enmeshed in a network of substance users) and provide short-term support through the behavior change process.

Effectiveness of Social Networks/Social Support Theory

While difficult to assess, many researchers conclude that the effects of improving social networks and social support are important health interventions (Berkman, 1984; Minkler, 1985). Since social support is closely linked to feelings of worth, the literature on the connection between self-esteem and HIV risk suggests a positive connection (UCSF AIDS Health Project, 1995). Nyamathi's (1991) work with homeless minority women also reports that those who feel social support are less likely than those who feel socially isolated to engage in HIV risk behaviors. Although the association was identified as being small, this may be due to the problems of accurately assessing the effects of social support. Furthermore, many groups at increased risk for HIV infection are also socially marginalized and thus may be in greater need of socially supportive systems and programs. This points to important current programs such as street outreach, day programs, group/individual counseling, peer-led interventions, and case management.

Diffusion Of Innovations

Overview and Application to HIV Intervention

Diffusion theory has been applied to effect widespread change for myriad social problems. Diffusion refers to the process through which any new idea—an innovation—is communicated to the members of a group or population (Rogers, 1983). Thus, the four primary components of Diffusion of Innovation Theory are: 1) the innovation, an idea, practice, or commodity which the target group perceives as new, 2) communication channels for dispersing the innovation message, 3) the time or process required for the innovation to reach group members, and 4) the presence of a social network or system that links the members of the target group (Dearing et al., 1994).

Diffusion theory is based on five concepts. Appropriate application of these concepts to the target issue and population will greatly influence intervention success. These concepts are:

- the time for an innovation to be diffused throughout a group and the way it is diffused are affected by the characteristics of the social and communication systems of the target group;
- opinion leaders (individuals who have gained trust and respect in a community) may be employed to communicate new information and they are most effective when their specific role is determined with the target audience in mind;
- the system for diffusing the innovation can be centralized (i.e., transferred from experts from the top down in a unidirectional flow) or decentralized (i.e., transferred through dialogue between source and target group);
- the characteristics of the person or medium communicating the innovation (the “change agent” will influence the success of the diffusion); and
- the innovation must be compatible with the existing values, experiences, and needs of the target group’s social system (Dearing et al., 1994).

HIV infection has greatly affected particular unique population groups, such as the gay community and injection drug users. Diffusion theory can inform effective interventions for these groups if the core concepts are appropriately adapted (Dearing et al., 1994). Since communication among members of marginalized groups tends to be frequent and characterized by high levels of trust, diffusion of information is typically rapid and pervasive. Therefore, opinion leaders may not be as effective as peer dialogue for disseminating information to unique population groups. This also suggests that a decentralized, dialectic approach should be used for diffusing information among these groups. The change agent within this decentralized approach ought to be indigenous to the group. For example, “the change agent working with intravenous drug users should have been a drug user” (Dearing et al., 1994). Lastly, the extent to which innovative behavior change interventions are compatible with the values, experiences and needs of special populations is particularly important. This emphasizes the necessity of culturally sensitive and appropriate intervention design.

Effectiveness of Diffusion of Innovations

HIV interventions based on diffusion theory are most likely to be successful if the special considerations mentioned above are applied. However, the nature of behaviors related to HIV infection present special problems for the successful application of diffusion theory. Rogers (1983) explains that the probability of target group members adopting the new idea or behavior depends on certain characteristics of the innovation. Given that HIV prevention interventions require addressing taboo topics such as sexual and substance use behaviors, communication channels may be restricted and other barriers to dispersing prevention messages are presented. Additionally, diffusion theorists explain that the preventive nature of HIV-related innovations makes it more difficult to successfully accomplish behavior change. Preventive innovations are generally less likely to be accepted because people may deny they are at risk, disbelieve that the proposed behavior change (condom or clean needle use) will actually protect them, or feel that

the cost of changing their behavior is greater than the benefit of avoiding possible infection (Dearing et al., 1994).

Social Marketing Theory

Social marketing as a behavior theory applies the concepts of traditional marketing to the “sale” or promotion of healthy behaviors (i.e., the product) to the target group (i.e., the consumer). As with the sale of merchandise, the components of social marketing include a market plan, a carefully designed message, employment of mass media, consensus building, and appropriate packaging (Coates and Greenblatt, 1990). A complete overview, application to HIV intervention, and description of effectiveness for social marketing is provided in the Strategies section of this chapter.

Conclusions

In summary, research shows that HIV intervention programs, particularly educational and skills building programs, are strongest when firmly grounded in behavior theory. This finding is especially important for community-based organizations designing programs that intervene on the individual and community level. Programs that combine theory with an understanding of the context and complex factors of the issue and consider the known effectiveness of previous work are likely to be the most conceptually firm and thus behaviorally successful. This underscores the need for sound evaluation of HIV interventions.

No single theory can be expected to encompass the complexity of human behavior as it occurs in natural settings. A well-designed program will start with the characteristics of the problem it seeks to address and those of the target population or intervention. Behavior theory is intended to provide a backbone for programs; programs should not be designed to support or test behavior theories. Modification of theories to meet the needs of particular issues or populations is recommended.

IV GUIDELINES FOR STRATEGIES AND INTERVENTIONS

Introduction

The guidelines specific to each strategy and intervention contain brief definitions, standards for service provision, expected impacts, effectiveness data, and suggested uses.

Definition and Description

The definitions for strategies and interventions strive to create a common language for HIV prevention in San Francisco. The Council acknowledges the fluidity of these definitions, as some programs may combine two or more strategies and interventions. The Council encourages and applauds creativity in program design.

Standards for Service Provision

The standards for service provision, listed as “requirements” and “recommendations,” are general guidelines developed to ensure the quality of service delivery for each strategy and intervention. Standards outlined as requirements are those that the Council has identified as essential components of a program using that strategy or intervention. A program using a particular intervention needs to address each of the requirements listed and explain any reasons for diverging from them. The recommendations are additional standards that, while not required, are important considerations for program design and service delivery.

Expected Impacts

The expected impacts are general impacts that the Council feels are reasonable and measurable for a particular strategy or intervention. These impacts can guide the evaluation of a program using that strategy or intervention.

Effectiveness

This section reports on the available research on outcome effectiveness and cost-effectiveness of each strategy and intervention. In most cases, a large part of this information was taken directly from the State of California HIV Prevention Plan (1994) and the City of San Francisco HIV Prevention Plan (1994). Additional material was added to update and supplement these findings. Information on the effectiveness of hotlines came entirely from the State Plan. The effectiveness sections for media and venue-based group outreach contain only new information not in the State Plan.

Suggested Uses

This section summarizes the issues to consider when choosing interventions and strategies for a particular type of target population. An intervention may be adapted to better serve a targeted group, but the suggested uses information should be taken into account when making those adaptations. The “Advantages/Strengths” point out individuals and groups for whom the strategy or intervention would be particularly suitable. Under “Considerations,” various characteristics that could result in limited usefulness of a strategy or intervention are listed.

STRATEGIES

A strategy is an approach to prevention that can be applied across a range of interventions. As stated previously, they are discussed separately from the interventions in this chapter.

Peer Education

Definition and Description

Peer education involves providing services by individuals who are recruited from a targeted population. These individuals are trained in HIV/AIDS (epidemiology, prevention, resources, etc.), peer counseling, outreach, and the issues of population groups which are difficult to reach with HIV information alone. The peer model can draw on established social networks to disseminate information. Peer education can be used in individual, group, and community-level interventions.

The importance of peers as educators is based in diffusion of innovation theory. Diffusion theory suggests that information and learning flows through natural social networks; people are more likely to adopt new behaviors if they are introduced by someone who is similar to them and is perceived to be a role model (Coates and Greenblatt, 1990; Dorfman et al., 1992). Peer educators may be similar to the target population by behavior, culture, race, age, ethnicity, gender, or other factors salient to the target population.

Since peer norms appear to be important influences on adolescent behavior, peer education can assist in changing the perception of norms with respect to HIV and risk behaviors (DiClemente, 1993). Research has shown that successful adolescent peer educators “evaluate AIDS information for authenticity, reconstruct it for themselves and their peers, and use their own personal or vicarious experiences as filters through which they interpret and pass along information and advice” (University of California, Office of Health Affairs, 1994).

Participants in all five focus groups sponsored in conjunction with the 1994 California State prevention planning process emphasized the importance of receiving information from peers. Peer education plays an important role in helping people perceive their own personal HIV-related risks. Perception of personal risk is an important factor in ultimately changing personal risk behavior.

Standards of Service Provision

Required

- Safety and support structures are built into program design.
- A contract detailing responsibilities and compensation of peer leader/educator is established between agency and peer educator.
- Agency provides adequate training, counseling, and supervision for peer educators.

- Agency provides adequate wages for paid employee peer educators.
- Agency recognizes that peer leaders/educators face the same issues that clients face. The difference between a peer leader/educator and a client is that the former has a responsibility to the agency. Protocols regarding the status of peer leaders/educators in their agencies must be observed.

Recommended

- Agency provides an incentive for peer leaders/educators.¹
- Agency develops a mechanism to incorporate feedback and experiences of the peer into program development.
- Agency creates mechanisms to insure diversity among peer educators.
- Agency includes mechanisms to increase sensitivity of the staff to the issues of their peer educators (through in-services, community panels, etc.).

Standards for Service Provision—Peer Education Interaction

Required

- Peers leaders/educators conducting interventions are truly perceived as peers by the target population. Peer leaders/educators perceived as both credible and of the target group are most likely to motivate behavior change, know how to eroticize safer sex, and be able to talk appropriately about sensitive issues.
- Peer interventions not only give information but also address behavioral change.
- Confidentiality is insured by peer leaders/educators conducting interventions.

Expected Impacts

For the target population(s)

- Destigmatization of HIV and related issues;
- Development of health-promoting attitudes, such as the realistic perception of personal risk for HIV;
- Referral to appropriate services/agencies;
- Increased awareness of HIV-related events, groups, and resources;
- Increased HIV knowledge and debunking of misinformation; and
- Intent to change or maintain behavior to prevent HIV transmission or reinfection (e.g., safer sex or needle use) and/or actual behavior change.

¹

The incentive may not necessarily be material, but may be considered in terms of other benefits to the peer educator/leader (such as the satisfaction of contributing to healthy community norms, or the pleasure of networking and meeting others who share the same concerns and objectives).

For peer educators (training and maintaining peers can constitute its own intervention)

- In-depth knowledge of HIV transmission and prevention;
- Development of community advocacy and self-advocacy skills;
- Intent to change or maintain safe behavior to prevent HIV transmission or reinfection (e.g., safer sex or needle use);
- Recognition of own risk as well as community risk;
- Sophistication of knowledge and tools required to teach and model for others in the target population;
- In-depth knowledge of appropriate resources and services; and
- Referral capability.

For the program

- Development of health education materials and interventions that are culturally and language appropriate to the target population;
- Increased recognition of the peer education and agency as a resource for and part of the target community;
- Cultivation of the community's trust in the agency and the peer educator; and
- Recruitment of peer educators and small group participants from among the target population(s).

Effectiveness

Outcome Effectiveness

Peer-directed interventions may be useful in providing a credible and positive role model for education recipients, and in creating a network of support to encourage self-protective behaviors (DiClemente and Hamilton-Houston, 1989). Peer educators may be effective in teaching gay men, who may have become quite skilled in condom use, to incorporate new skills, such as learning how to initiate frank discussion about HIV status, or reducing the number of sexual partners with whom anal intercourse occurs (McKusick, Hoff, Stall, and Coates, 1992).

Peer educators can positively effect group norms, and peer educators are better able to talk frankly about sensitive issues around sex and drug use. Eroticizing condom use and emphasizing the erotic appeal of safer sex are critical components of interventions designed to change sexual behavior (Catania et al., 1991). Peer educators may be better equipped to understand what a particular group may or may not find erotic. "Helpful support from more formal sources (e.g., physicians, psychologists, etc.) was not associated with changes in condom use" (Catania et al., 1991).

Current research indicates that HIV prevention delivered by peers may be viewed as more credible and sensitive than interventions delivered by local, state, or federal health officials

(Centers for Disease Control and Prevention, 1993). A number of studies demonstrated the effectiveness of peer based interventions with different populations.

A study of African-American youth in San Francisco indicates that participants in a peer-led skills training regard peer education as useful and important (University of California, Office of Health Affairs, 1994). In addition, a small pre- and post-survey of out-of-school youth who participated in group peer education indicated increased level of knowledge and intention to use condoms. This group indicated that they were more likely to ask questions about sex to peer educators than adults (Lemp, Sumaraga and Packer, 1994).

An assessment of the HIV prevention needs of gay and bisexual men of color found that programs that were the most effective for HIV prevention among gay men of color are those run by and for gay men of color (U.S. Conference of Mayors, 1993). An evaluation of a program that trained popular people in gay bars to serve as informal peer educators showed a reduction in high-risk behavior. The results support the utility of norm-changing approaches to reducing HIV risk behavior, accomplished through the use of peer educators (Kelly et al., 1992).

The peer model also is used in other areas of health promotion. In their review of peer-led programs aimed at preventing the onset of smoking, Klepp et al. (1986) report that it is an effective approach overall. However, not all of the studies examined showed superior results for peer- versus teacher-led interventions. The authors suggest that differences in outcomes could be due to program differences such as lack of appropriate training and other organizational variations.

The peer education model was evaluated for its outcome effectiveness in delivering alcohol education in Australia, Chile, Norway, and Swaziland (Perry and Grant, 1988). Researchers compared outcomes from a peer-led intervention, a teacher-led education program, and a control group receiving no intervention. The study found that students receiving the peer-led intervention had significantly lower alcohol use scores than students in the teacher-led program. In addition, there were no significant differences between the teacher-led and the control conditions. The peer-led and teacher-led interventions did not show significant differences in knowledge gained (Perry and Grant, 1988). These results suggest the effectiveness of peer education for behavior change in particular.

A more recent look at the effects of peer leaders in smoking prevention (Telch et al., 1990), found that seventh grade students who viewed a video tape and then engaged in a peer-led "social resistance training" were much less likely to experiment with or start smoking than students who saw the video only. Differences in alcohol and drug use were also found, although not as significant.

Suggested Uses

Advantages/Strengths

- Peer education as a strategy is generally applicable to all populations, with a few exceptions.
- Peer education is especially suited for populations who do not initially perceive themselves to be at risk.

Considerations

- A peer approach may not appeal as much to members of small/close communities where information travels fast and stigma may still be attached to HIV concerns. Some groups may prefer to receive HIV prevention services from people they view as outside of their immediate community, so that they can talk more freely and not fear leakage of information.
- Peer education may not be appropriate for individuals desiring anonymity; confidentiality should be emphasized in this case.

Natural Opinion Leaders

Definition and Description

Natural opinion leaders are key people who are recognized as influential and charismatic members of a community or communities. These individuals are seen as models whose opinions and behaviors are likely to influence the opinions and behaviors of a target population. An opinion leader is a member of the community who is particularly popular or respected by other members of the community. An opinion leader may be viewed as representing her/his community in the entertainment field, sports, government or politics, academia, business, popular culture, community work, and so forth.

Standards for Service Provision

Required

- Natural opinion leaders are identified and determined by the target population.
- Natural opinion leaders participating in education and prevention efforts are trained in basic HIV/AIDS/STD knowledge, as well as informed about existing resources, services, and approaches for HIV/AIDS education and prevention.

Expected Impacts

- Acceptance by members of the target audience that HIV/AIDS issues are relevant to their community(ies) and their personal lives (development of realistic perceptions of risk);
- Increase in receptiveness toward AIDS/HIV-related information;

- Destigmatization of HIV/AIDS issues, and loosening of stereotypes of people affected by the epidemic;
- Some increased knowledge and/or debunking of misinformation; and
- Increased motivation to participate in HIV prevention activities.

Effectiveness

Outcome Effectiveness

In a review of NIMH sponsored research on prevention interventions (Office on AIDS et al., undated manuscript), the authors cite several studies demonstrating effectiveness of the “social diffusion model” to change behavioral norms through natural opinion leaders as relayers of peer messages. Kelly et al. (1991) found that “interventions that employ peer leaders to endorse change may produce or accelerate population behavior changes to lessen the risk for HIV infection.” Gay men who were identified as popular opinion leaders were trained to educate friends and acquaintances about HIV prevention. The study found that the percent of men engaging in unprotected anal intercourse declined, a 16% increase in condom use was reported, and there was a decrease in the proportion of men with multiple sex partners. In comparison cities there was little or no change in sexual behaviors.

There is substantial evidence that after specific announcements of personal HIV status by public figures such as Rock Hudson or Magic Johnson, hotlines and informational outlets become deluged with questions from concerned individuals, usually relating to their own HIV risk behaviors. Certain celebrities clearly have a powerful ability to draw attention to an issue such as HIV, and to prompt people to consider their own personal levels of HIV risk.

As a strategy for preventing HIV infections, however, the usefulness of high profile natural opinion leaders, such as Magic Johnson, may be limited. Natural opinion leaders, due to their widespread visibility, can be instrumental in increasing awareness and knowledge of HIV/AIDS and related prevention services, but that does not necessarily mean that they can also effect behavior change.

Cost-effectiveness

In a summary of analyses of cost-effectiveness, James Kahn, MD, MPH, (1995) cites several studies including one (Kahn and Haynes-Sanstad, manuscript) that found that training leaders in the gay community in Biloxi, MS was a cost-effective approach to averting new HIV infections.

Suggested Uses

Advantages/Strengths

- Use of natural opinion leaders as a strategy is appropriate for people who feel some group identification and who recognize community leaders.
- This approach may be especially suitable for groups such as youth, who value sports stars, movie stars, and other media heroes.
- Using natural opinion leaders may be especially useful in targeting people with perceptions of low risk either personally or for the community as a whole.
- This strategy can be powerful for groups in which social stigma is heavily attached to homosexuality or injection drug use.

Considerations

- Delivering prevention messages via natural opinion leaders may not be appropriate for individuals or groups that lack community identification, as the strategy relies on the relationship between the chosen opinion leader and the group targeted.

Social Marketing

Definition and Description

Social marketing is the concept of using traditional marketing tools employed to sell consumer products, to “sell” healthy behaviors to target audiences. The goal is to promote behavior which is socially desirable and that contains clearly defined value for the individual (and community), such as smoking cessation, HIV prevention, or childhood immunization. A particular behavior (such as condom use) is made socially desirable by linking it to something that is valued by the targeted community (such as family values or erotic sex).

Social marketing involves the production of a message disseminated through a mode that is appropriate and effective for the target population. It includes development of a marketing plan, design of a message, use of mass media, consensus building, and packaging (Coates and Greenblatt, 1990). Social marketing is successful when it involves active participation of both the providers and the recipients of information and/or services at each stage of the process. In this way, the target group will recognize the benefit(s) of the program and can adopt (or buy) the changes advocated. Social marketing in its ideal form requires thorough program planning and integration. In addition, market research, testing, and evaluation are critical components to effective social marketing.

Standards of Service Provision

Required

- Formative evaluation or assessment of the characteristics of the target population is necessary for effective and culturally and linguistically appropriate social marketing strategies.
- Formative evaluation identifies the salience of the issues, the stage of behavior change, the social norms, and appropriate message channels for the target population.
- To attempt to change behavior, social marketing campaigns demonstrate the desired behavior in a real-life context.
- Campaigns promote the idea that adoption of this behavior will result in lower HIV risk.
- Messages are field tested with the target population before implementation.
- Campaigns or interventions are composed of clear, concise messages, reach the target population with adequate frequency, and are presented long term to establish maintenance of attitude or behavior change.
- Social marketing strategies link the target population to available resources and enact community building.
- Effective social marketing campaigns have input from members of the affected target population.
- Content and form of campaigns affirm health promoting social norms of the target population.

Expected Impacts

- Increased awareness of risk for HIV;
- Increased knowledge of risk factors for HIV;
- Increased knowledge of HIV and HIV prevention;
- Increased knowledge of resources and referrals;
- Change in attitudes toward issue of HIV/AIDS;
- Increased motivation to participate in HIV prevention activities;
- Behavior change *only with* supportive program components; and
- Increased public support for desired behavior change.

Effectiveness

Outcome Effectiveness

While there are few studies evaluating the effects of social marketing as an HIV prevention strategy, this educational approach has been widely regarded as being instrumental in helping to change community norms regarding safe sex among gay men in San Francisco in the 1980s. “Media programs, effectively designed and executed, can change behavior significantly. The evaluations of the Swiss and French media campaigns have taught us that.” (Coates and Stryker, 1994).

Research exists that evaluates social marketing as an approach to promote other health behaviors. Rabin and Porter (1995) discuss two prevention programs aimed at smoking cessation and cardiovascular health which employed social marketing tactics and tools. This strategy was found to lead to improvements in these areas. It was noted that while this was the most effective way to reach a large group of hard-to-reach people, a campaign needs to be augmented with personal and community contacts as a follow-up. The support of additional partners in the community is also critical.

Foerster et al. (1995) studied the effects of the California Department of Health Services' "5 a Day—for Better Health!" campaign to increase fruit and vegetable consumption statewide. Evaluation data indicated that the campaign appeared to raise public awareness. While there was increased consumption of fruits and vegetables in some segments of the population, the authors note that lack of an experimental design limits the degree to which changes in diet can be attributed to the campaign. They discuss how long-term and intensive efforts are critical to effecting behavior change in populations, as time is needed to move through the behavior change continuum.

Similarly, the Stanford Five-City Project, a community-wide education campaign to reduce cardiovascular disease risk factors, used social marketing methods as well as community organization principles in its five-year, multi-intervention approach. Small but significant reductions were noted in various risk factors for the overall population. Although many limitations to the study existed, the authors concluded that "such low-cost programs can have an impact on risk factors in broad population groups" (Farquhar et al., 1990).

Suggested Uses

Advantages/Strengths

- The social marketing strategy can be effective with those who need new information to change behavior.
- The social marketing strategy can be effective with those who want to change their behavior but have not. Social marketing can motivate people to take action.
- Social marketing can be accessible to those who are difficult to reach through traditional prevention channels.

Considerations

- Social marketing may not be appropriate for those engaging in highest risk behavior.
- Social marketing techniques may be unsuccessful with those who are isolated and do not see themselves in relation to the campaign.

Community Organizing

Definition and Description

Community mobilization and organizing involves community-wide efforts which bring together members of the targeted community to address the issue of HIV and/or other related issues (drug use, homophobia, racism, etc.). Methods used to bring members of the community together vary according to the needs and characteristics of the target population. The theoretical underpinning of community organizing for health behavior change is based in several theories including Social Learning Theory, the Health Belief Model, Attitude Change Theory, Diffusion Theory (Coates and Greenblatt, 1990), and Empowerment Theory (Minkler, 1985). Community organizing involves defining a community by understanding how the target population defines its community. This could be geographical, cultural, gender-related, environmental, behavior, issue-related, and many other ways. Community organizing can address the population characteristics that create obstacles to HIV risk reduction and can create networks which can be utilized for conducting other interventions, and can provide a means for creating health promoting social norms.

Standards for Service Provision

Required

- Problem is defined by the community, as is the solution and course of action;
- Agency facilitates the process and secures resources to promote community involvement;
- Agency must be able to address multiple needs of communities or demonstrate linkages with other agencies that can address those issues;
- Confidentiality is a central part of community organizing, as people may come together about issues that are private to them.

Expected Impacts

- Development and strengthening of social norms for HIV prevention;
- Increase in channels by which people can communicate and promote HIV prevention norms to each other;
- Development of realistic perceptions of risk;
- Increase in skills for self advocacy;
- Identification of barriers (psychosocial, psychocultural, political, economic) to HIV prevention in the community;
- Decreased sense of isolation;
- Increased community participation around issues affecting the community;
- Increased sense of personal control;
- Increased sense of supported identity;
- Community will be organized around issues of HIV (drug use, racism, homophobia); and
- Strengthened social networks.

Effectiveness

Outcome Effectiveness

A number of studies have preliminarily indicated that community organization, by involving the entire community in its efforts and by addressing the root causes of HIV-related risk behavior, can potentially have a dramatic effect on community norms, and can effect a reduction in risky behavior. An exploratory study in San Francisco of Latina/os and of non-Latino Whites, for example, found that community and family members “revealed a high willingness to provide AIDS prevention advice to drug-using friends and family members” (Marin et al., 1992). Such an approach may be particularly effective among Latina/os since there is a high degree of importance placed on the family. The literature also indicates that effective community-specific HIV/AIDS prevention strategies should originate from community members themselves, as a way to assure both accessibility and applicability.

The inter-community environments in which community mobilization messages are presented must vary to reach as many at-risk individuals as possible. In the case of community organizing to reach young people engaged in high-risk behavior, an effective mobilization model can be visualized as three interlocking circles, involving—in the case of adolescents—home, school, and the community. Health education projects have been most successful in this model when parents have been involved as an integral component (Marin et al., 1992).

Other research demonstrates the effectiveness of community mobilization. A community-level approach developed and implemented by peers of the target population was effective in decreasing unprotected anal intercourse relative to those in a control community (Kegeles et al., 1993). Effective organizing of the gay and bisexual community in San Francisco in the mid- to late 1980s contributed to the dramatic decrease in unprotected anal intercourse that decreased HIV transmission during that period (Coates and Greenblatt, 1990).

Kegeles and her colleagues (1996) report that a community organizing approach to HIV prevention intervention with young gay men aged 18 to 27 years old resulted in significant decreases in the proportion of study participants who engaged in unprotected anal intercourse. With casual partners, proportions engaging in unprotected anal intercourse changed from 19% to 21% at baseline assessments to 13% at the two month post-intervention assessment to 11% at the one year post-intervention assessment. With boyfriends, proportions engaging in unprotected anal intercourse changed from 54% to 57% at baseline assessments to 42% at the two month post-intervention assessment to 50% at the one year post-intervention assessment. The return to unprotected anal intercourse with steady partners in the one year post-intervention assessment suggests that this type of intervention with young gay men must be sustained over time.

Similarly, the Stanford Five-City Project, a community-wide education campaign to reduce cardiovascular disease risk factors, used community organization principles as well as social marketing methods in its five-year, multi-intervention approach, and small, but significant, reductions were noted in various risk factors for the overall population (Farquhar et al., 1990).

Cost-Effectiveness

In his summary review of studies on cost-effectiveness of HIV prevention, James Kahn, MD, MPH (1995) cites an analysis of a community level peer mobilization effort among young gay men in western U.S. cities (Kegeles, Kahn and Hays, draft). The cost per HIV infection averted was reported to be \$11,500, a figure much lower than the medical costs associated with treating a case of HIV/AIDS.

Suggested Uses

Advantages/Strengths

- Organizing is most likely to be successful in communities that have a strong identification. This could be geographical, psychosocial, psychocultural, political, economic, or other defining characteristics that would bring a group of people together.
- This strategy is also suitable for isolated populations, whose members need connection, although this is challenging.
- Community organizing is particularly appropriate for groups with multiple issues.

Considerations

- Populations that fear lack of confidentiality may refuse to come together, such as small populations where privacy is an issue.
- Community mobilization could be difficult with populations where organizing resulting in identification of its members could endanger the community, such as undocumented immigrants or commercial sex workers.

INTERVENTIONS

Interventions are divided into three categories: one-on-one, small group, and community level interventions. Within each of these categories, separate interventions are described.

ONE-ON-ONE INTERVENTIONS

One-on-one interventions are those in which a single provider interacts with an individual client. The individual receives a focused, client-centered intervention.

Venue-Based (Street And Community) Individual Outreach

Definition and Description

Venue-based individual outreach is a one-on-one interaction, preferably with a pair of outreach workers covering the same venue, that may include the distribution of appropriate prevention materials, assessment of a client's needs, provision of health education and risk

reduction information and referrals, and dialogue about a client's issues regarding HIV. The success of a venue-based outreach program is critically dependent on the skills of its outreach workers. Outreach is most effective when it is consistent, continuous, and performed by someone indigenous to the community targeted. As outreach can also be a community-level intervention, it is listed separately in the community-level section of this document.

Street and community-based outreach programs are widely used to reach large groups of people. Outreach workers provide services to persons in their natural settings, and serve as links between programs and communities. In San Francisco, trained community health outreach workers (CHOWs) conduct direct AIDS education, including distribution of condoms, bleach, and educational materials, with community members (Watters, unpublished manuscript).

Research data, focus group participants, key informants, and providers all emphasize that outreach services must be appropriate to the target population and its norms. Clients should be able to identify with outreach workers. For example, research shows using outreach workers from the community contributes to the positive impact of outreach programs targeting IDUs (Coates and Stryker, 1994).

Venue-based outreach can be done in a variety of locations: the street, homes, raves, schools, churches, temples, synagogues, mosques, hospitals, sport leagues, gyms, the general assistance (GA) office, single room occupancies (SROs), halfway houses, public housing, laundromats, crack houses, fairs and other community events, massage parlors, porn theaters, community centers, gambling parlors, businesses (such as Tower Records), and so forth. Venue-based outreach can be structured as a one-time intervention or can be part of a long-term relationship established by the CHOW with a client or community.

Standards for Service Provision

Required

- Venue-based outreach takes place in a natural or community setting at appropriate times of the day/night, week, and year.
- Appropriate training is essential to provide CHOWs with necessary skills and knowledge to successfully implement program. Training addresses safety issues (of CHOW and client), referrals (ensuring that the "whole person" is addressed), and policies about field notes (especially their confidentiality and the importance of anonymity of the client).
- Outreach workers are given training in the principles of prevention case management (see next section), which can be taken to the streets or other venues (mobile).
- Outreach workers establish themselves and the agencies they represent as resources for the community regarding HIV, STDs, substance use, and support for other issues (such as poverty, racism, homophobia, sexism, discrimination based on gender identity, etc.).

- The interaction supports the client's current prevention needs, whether these are for no interaction, prevention materials only, basic information, referrals to or on-the-spot case management, or counseling on test results.
- Information available to clients should deal not only with HIV/AIDS but with injection drug use, other substance use, hormone injection, and/or any other health issues that may be related to client risk.
- Latex barrier and bleach distribution and demonstration is an integral part of street and venue-based individual outreach and is continuous to reach the constant influx of people.
- Outreach workers need to provide documentation and data collection appropriate to the venue.²
- Follow-ups are completed with clients whenever possible.
- Outreach service providers say consistency in outreach workers is important to the success of outreach programs. High turnover among outreach workers is a problem because rapport between the worker and the community is vital to the success of outreach programs.
- Outreach providers also indicate that to be more effective over time, outreach contacts must be repeated regularly or include follow-up support.

Recommended

- Outreach can use media, video, and other interactive technology.
- Outreach can sometimes be suitable as a one-step process, but is generally more valuable as the first of multiple contacts.
- Outreach can be done as part of street-based prevention case management.
- When appropriate, outreach should a) address continued risk behaviors in the face of HIV knowledge, b) follow up on materials distribution, c) include referrals, and/or d) be conducted as prevention case management for chronic high risk behaviors.

Expected Impacts

For the program

- Venue/institutional participation and support—the development of a cooperative relationship with schools, businesses, bars, etc.;
- Establishment of CHOWs and agency as a resource for and part of the community—cultivation of trust; and
- Recruitment of peer educators and participants for small groups, along with general dissemination of information about HIV-related events and resources.

² Data collection for outreach and for peer education is necessarily indirect and general, rather than an overt, survey-style data collection. Field notes are often brief, anonymous (do not unmistakably identify client), confidential, and journal-like in style. Clipboards are generally a barrier to communication, especially for recent immigrants and sex workers. However, they have worked in the past with gay men, some sex workers, and some transgendered people on a limited basis, and when a particular CHOW has established a long-term relationship with a particular community.

For the target population(s)

- Destigmatization of HIV and related issues;
- Development of health-promoting attitudes, such as the realistic perception of personal risk for HIV;
- Increased HIV knowledge and debunking of misinformation;
- Intent to change or maintain behavior to prevent HIV transmission or reinfection (e.g., safer sex or needle use)—this can be assessed partly by what clients take and what they decline of the materials offered them, how they listen, questions they ask, etc.; and
- Referral to appropriate services/agencies.

Effectiveness

Outcome Effectiveness

Several studies discuss the effectiveness of outreach programs and of the core elements that influence that effectiveness. Researchers state that the most critical factor to effectiveness is the outreach staff themselves. Staff field workers, as much as pamphlets, condoms, and bleach handed out, need to be considered as intervention strategies in themselves. For an outreach program to be effective, the staff delivering the intervention needs to be respected, trusted, credible, open, and friendly, dedicated, and non-threatening and non-judgmental. Once such trust is established, however, the results can be impressive. In one study of 554 IDUs in San Francisco, almost one quarter (24%) reported learning about bleach use from a community health outreach worker (Watters et al., 1990).

In an analysis of outreach prevention activities in three U.S. cities, Birkel et al. (1993) found that “the presence of indigenous outreach workers in the neighborhoods of these three cities created significant reductions in both needle and sex risk behavior...The intervention appeared to be least effective in lowering sex risk, particularly among females, and among subjects 25 years and younger...”

“A combination of the following reasons may be linked to the lesser reduction of sexual risk that occurred and the continued high rates of unsafe sexual practices among females....1) desire to have children; 2) IDUs surveyed were almost entirely Hispanic-Catholic, and religious beliefs and values that were anti-birth control may undermine the use of contraceptives; 3) culturally based values regarding male sexual behavior; 4) many females feel powerless to protect themselves through insistence on safe sexual practices...” (Birkel et al., 1993).

Research and other data show street outreach is successful in communicating prevention messages to many populations and is associated with behavior changes, especially when it involves peer leaders, targets particular communities, and reaches them near the location of risky behavior (Givertz and Katz, 1993; Watters et al., 1990). For example, a peer-led street outreach program in Chicago targeting injection drug users not in drug treatment affected a substantial reduction in needle-sharing behaviors, from 100% to 14% (Weibel et al., 1993).

Street and community-based outreach services are the only intervention proven in published research to demonstrate some successes with youth, one of the most difficult groups to reach with prevention messages (Givertz and Katz, 1993). Clements and her colleagues (1996) reported that in their assessment of the effectiveness of enhanced street outreach interventions targeting homeless youth in San Francisco, youth in the intervention site were more likely than those in a comparison site to have had frequent contact with an outreach worker, which correlated with important impacts such as increased likelihood of discussing personal sexual and drug use behaviors, receiving bleach, and viewing needle cleaning and proper condom use demonstrations. Additionally, youth in the intervention site were more likely to discuss drug treatment resources, HIV testing sites, available shelter, and health care clinics. Regarding change over time, youth in the intervention site demonstrated an increase “in the prevention practices of receiving HIV counseling and testing and carrying condoms at the time of the interview.”

Additional research has shown that staff who were from the targeted community and population were more likely to gain access to sex workers and became role models for behavior change (Dorfman et al., 1992). Building trust with members of the target population has been found to be an important factor for continued participation of the target population (Dorfman et al., 1992).

Earhardt et al.’s (1995 draft) review of interventions for at-risk women discussed increased condom use among female sex partners of IDUs living in housing projects who were the target of outreach efforts. However, methodological difficulties in assessing the impact of community interventions are an important consideration in evaluating effectiveness. A review of HIV prevention interventions by Choi and Coates (1994) found only three studies reporting on the effectiveness of community outreach to commercial sex workers, all outside the U.S.; all showed increased condom use. In addition, the authors found two studies looking at street outreach to out-of-treatment IDUs that found the intervention to be effective in reducing needle sharing and to a lesser extent increasing condom use.

Suggested Uses

Advantages/Strengths

- Outreach is especially appropriate for populations with the following characteristics:
 - low perception of personal risk for HIV;
 - lack of access to health and social services; and
 - in need of basic information.
- This intervention can also serve as an opportunity to recruit clients targeted for other prevention activities.
- The Center for AIDS Prevention Studies (CAPS) at UCSF lists community outreach as an effective approach leading to changed behaviors among IDUs (Wiebel et al., 1993; Bortolotti et al., 1992).

Considerations

- Outreach may not be suitable for individuals with serious mental health stressors.
- The intervention is not as appropriate for populations that are well-informed but continue to show high rates of infection.
- Outreach may not be appropriate or allowed in certain venues; the needs assessment can help to determine the feasibility of outreach.
- The intervention may lose its impact if it is over-concentrated in a venue. After saturating a venue over a period of time, the intervention needs to adapt to prevent desensitization. This can be accomplished either through a less aggressive outreach presence or through a creative change in how the intervention is performed.
- Outreach cannot always meet clients' needs for services because of a lack of available referral resources.

Prevention Case Management (PCM)³

Definition and Description

HIV prevention case management concentrates on providing prevention education and counseling. It also functions to identify, coordinate, and/or deliver appropriate and culturally-specific primary and secondary HIV prevention services. While regular case management requires a more exclusive focus on direction to services and practical assistance, prevention case management allows the opportunity to provide more emotional and psychological support. HIV prevention case management provides intensive, individualized support to assist persons to remain seronegative or reduce the risk for re-infection with HIV and other infectious diseases. The issues with which a prevention case manager works are those that put the client at risk for HIV infection, reinfection, or infection of others. The prevention case manager identifies any personal or environmental factors in the client's risk, and then intervenes to reduce those factors, connecting the client to services in the process. However, the prevention case manager continues the relationship with the client **beyond** the referral stage, dealing with mental health concerns such as self-esteem and other issues that keep the individual at high risk for transmission of the virus. Ideally, PCM builds client self-efficacy skills and assists the client in making a plan for risk reduction in adversity.

³ Prevention Case Management is a relatively new intervention and little has been written about it. Much of the information in this section comes from correspondence and conversations among staff members of the Asian AIDS Project and the National Task Force on AIDS Prevention, agencies which conduct PCM, and the HPPC.

Standards for Counselor Training and Service Provision

Required

- Training includes the peer support model of listening, being non-judgmental, and showing empathy.
- Training incorporates the principles of case management, including client charting, and orientation to existing services that can assist the prevention case manager in reducing external risk factors and co-factors.
- Primary training and ongoing support (including clinical supervision for specific issues such as suicide, domestic violence, rejection, substance abuse, rape, and self-esteem) are provided and made as available to peer case managers as they are to staff.
- Prevention messages address the complete needs of the individual. PCM programs have very strong coordination with auxiliary services (i.e. social services, housing, legal services, general assistance, substance use treatment services, job development, vocational training, mental health programs, domestic violence shelters/services, family planning, child protective services, primary health care, continuing education, English as a Second Language programs, immigration services, services for transgendered persons, and youth services to secure appropriate and quality care and treatment).
- Prevention case managers have the ability to refer a client to another case manager for greater service linkage.
- PCM programs conduct regular case file evaluations, as well as implement anonymous client evaluation surveys to review PCM effectiveness.
- Qualifications of a prevention case manager include familiarity with existing services, knowledge of emotional and practical support methods, skills in risk assessment, and a cultural fit (though not necessarily in all respects) with the targeted population.
- PCM is flexible regarding HIV status, so that it may provide continuity and referrals for clients who become seropositive.
- PCM services are provided at flexible times and locations outside clinical settings as appropriate to the target population.

Recommended

- The agency incorporates stress reduction into the work environment.
- The program allows for ongoing identification of additional specialized training needs, and should be able to fill in the gaps as necessary.
- A prevention case manager teams up with a program outreach worker(s) to establish recognition, credibility, continuity of services, and trust for the prevention case manager in the target community.

Expected Impacts

- Increased HIV knowledge and debunking of misinformation;
- Intent to change or maintain behavior to prevent HIV transmission or reinfection (e.g., safer sex or needle use);

- Increased support to client for safer sex and responsible decision-making;
- Contribution to the development of community norms favoring safer sexual and drug-related practices; and
- Linkage and access to much-needed services that improve the quality of life.

Effectiveness

Outcome Effectiveness

Because prevention case management is a relatively new concept in HIV prevention, there are no formal evaluations to which to refer. There are, however, many reasons to believe that it can act as an effective strategy. Extensive evidence has supported the efficacy of comprehensive and intensive prevention programs. Prevention case management is able to assist an individual to address all of the potential risk factors that can lead to unsafe behavior. In addition, personal efficacy is one of the strongest predictors of low sexual risk-taking (Stall, Coates, and Hoff, 1988). Personal efficacy can be built through prevention case management.

Choi and Coates (1994) commented on the effectiveness of one-on-one interventions, in general. "Individual interventions change behavior, but are probably not equal to the task of risk reduction for populations with high prevalence of HIV infection. ... Those at highest risk may not avail themselves of the counseling."

Cost-effectiveness

While data on PCM specifically was not available, James Kahn, MD, MPH (1995) reports on several cost effectiveness studies. He cites one study (Kahn, Washington, Showstack et al., 1992) that found extended counseling for IDUs in East Coast cities to be cost effective in that the cost per HIV infection averted was estimated to be between \$3,500 and \$4,000. This cost is substantially less than the estimates of the cost of medical care for someone with HIV/AIDS.

Suggested Uses

Advantages/Strengths

- PCM can help to meet the needs of people seeking some stability/regularity in their lives.
- PCM can meet the needs of people on the street, if the intervention is street-oriented and designed for mobility.
- PCM can especially impact people who are reaching an action stage in dealing with health concerns.
- PCM can be suitable for individuals visiting a health center/hospital, where clients can be drawn in from other departments.
- PCM can be suitable for individuals targeted for outreach if providers are able to gain trust in the community by doing their own outreach/recruitment.

Considerations

- PCM may not be appropriate for people with low perception of their risk for HIV; these people are less likely to seek linkage to services (for housing, financial assistance, etc.) from an HIV/AIDS-identified organization.
- PCM may not be suitable for individuals who are not able to keep appointments.
- Prevention case managers have often had difficulty forging a relationship with the community they intend to serve
- PCM may be more effective when it functions as a **piece** of a comprehensive service system, than when it tries to provide a comprehensive set of services itself.

Individual Risk Reduction Counseling⁴

Definition and Description

Individual Risk Reduction Counseling (IRRC), is a personalized, client-centered encounter between an individual and a trained counselor. It can be a one-time intervention, or the client and counselor can meet multiple times. The intervention creates the opportunity for an individual to learn to recognize her/his own risk, ask questions about safer sex in a safe environment, and formulate personal risk reduction plans. The intervention begins with an assessment of the client's risk for HIV. Counseling also involves building skills to change the behaviors that put one at risk for HIV and providing support for maintaining a low risk status. Counselors also provide basic education on HIV prevention. Clients can also receive referrals and information relevant to their needs.

The setting of IRRC can vary significantly, and it is a highly mobile intervention. The intervention can take place in an outreach, clinic, community center setting, or over the telephone. Some of the following standards for service provision come from standards for Individual Level Education or Counseling Sessions, as defined in the AIDS Office Units of Service document.

Standards for Service Provision

Required

- According to the Units of Service document developed by the AIDS Office, counseling sessions must be at least 30 minutes long and must include:
1) HIV/STD information and dissemination; 2) documentation of discussion of risk behaviors; 3) counseling; 4) skills building; 5) documented referral(s), if given; and 6) documentation of client demographics.
- Counseling must be client-centered and focus on the needs of the individual.

⁴ This section was developed in 1996.

- Counseling should acknowledge substance use, housing issues, joblessness, etc. as possible barriers to HIV prevention; and should provide linkages to services for housing, substance treatment, jobs, etc.
- Counselors should be able to demonstrate that they understand how the target population is affected by other (non-HIV-specific) issues, and should address those issues to some degree, whether by referrals or otherwise.
- Staff in clinic or other health care settings are given adequate training in client-centered counseling.
- Staff/volunteers should be trained in issues relevant to adolescents.

Recommended

- Peer models can be very effective in delivery of IRRC.

Expected Impact

- Increased HIV knowledge and debunking of misinformation;
- Increased understanding and awareness of personal risk;
- Increased understanding of strengths and obstacles;
- Increased skills for behavior change or maintenance;
- Development of a realistic risk reduction plan;
- Intent to change or maintain behavior to prevent HIV transmission or reinfection (e.g., safer sex or needle use);
- Increased support to client for safer sex and responsible decision-making; and
- Linkage and access to much-needed services that improve the quality of life.

Effectiveness

Outcome Effectiveness

In a review of the effectiveness of strategies to reduce HIV risk among injection drug users (IDUs), Des Jarlais (1995) refers to the individual risk reduction counseling intervention implemented as part of the National AIDS Demonstration Research/AIDS Targeted Outreach Model (NADR/ATOM) project. He reports that almost all participants receiving the intervention demonstrated “substantial reductions in injection risk behavior from the baseline assessment to the follow-up interviews, with the percentage of IDUs reporting they did not ‘always use a sterile needle’ declining from 64% to 41%, while those reporting ever sharing needles declined from 54% to 23%.” However, there were no differences found in behavior change between participants receiving the “standard” intervention (i.e., provision of basic HIV/AIDS information) compared to those receiving the “enhanced” intervention (i.e., an additional two to six hours of education and counseling).

Preliminary results from an evaluation of a multi-site individual risk reduction counseling intervention with heterosexuals attending STD clinics also indicate the effectiveness of this approach. Kamb et al. (1996) report that among their large sample of heterosexual men

and women: “comparing baseline to three month (follow-up) interviews on condom use with vaginal sex, the proportion reporting no condom use with a main partner (MP) decreased from 52% to 32%, and with other partners (OPs) from 33% to 16%. The proportion reporting 100% condom use with an MP increased from 14% to 34%, and with OPs from 28% to 57%.”

Suggested Uses

Advantages/Strengths

- Because it is based on a client-centered model, individual risk reduction counseling is generally suitable for all populations as it can be tailored to the individual.
- IRRC provides personal attention to individuals for whom privacy and confidentiality is important.
- IRRC can especially impact people who are reaching an action stage in dealing with health concerns.
- Counseling can be suitable for individuals visiting a health center/hospital, where clients can be drawn in from other departments.
- IRRC can be suitable for individuals targeted for outreach if providers are able to gain trust in the community by doing their own outreach/recruitment.
- This intervention can also serve as an opportunity to recruit clients targeted for other prevention activities.
- The mobile aspect of IRRC allows flexibility to reach many populations.

Considerations

- Ongoing risk reduction counseling may not be effective for clients unable to keep appointments.
- One-time counseling sessions may not have impact on behavior change.

Counseling, Testing, Referral, and Partner Notification (CTRPN)

Definition and Description—General CTRPN

Counseling and testing provides a personalized, client-centered encounter in which an individual can learn her/his serostatus as well as obtain tools to assess her/his own risk. Counseling can also help clients develop personal methods for behavior change that decrease risk for HIV and helps in maintaining a low risk status. Clients can also receive referrals and information relevant to their needs as well as assistance in notifying partners.

Prevention providers report that counseling and testing services can motivate individuals to recognize their risk, ask questions about safer sex in a safe environment, and formulate personal risk reduction plans. Counseling and testing programs also allow prevention providers to identify new target populations. Providers note that demand for testing is large.

All CTRPN programs must adhere to the standards outlined in the following two documents:

- Center for Disease Control, HIV Counseling Testing and Referral, Standards and Guidelines
- San Francisco Department of Public Health, AIDS Office, HIV Prevention Services, HIV Counseling Testing and Referral and Partner Notification, Unit of Service Documentation, Policies and Guidelines

CTRPN consists of several components, each of which is described separately. The Standards for Service Provision are listed after the descriptions of each component, followed by expected impacts.

Standards for Service Provision—General CTRPN

Required

- Staff/volunteers must be certified to provide counseling and testing and outreach for CTRPN services.
- CTRPN activities must be client-centered and focus on the needs of the individual.
- Staff/volunteers should be trained in issues relevant to adolescents.
- Secretary/clerk of organization should be trained so that all staff have knowledge of counseling and testing and access to testing issues.
- Counseling and testing should be a bridge to care as appropriate—should fit into the continuum of care from prevention to health services.
- Should acknowledge substance use, housing issues, joblessness, etc. as possible barriers to HIV prevention; and should provide linkages to services for housing, substance treatment, jobs, etc.
- Counselors should be able to demonstrate that they understand how the target population is affected by other (non-HIV-specific) issues, and should address those issues to some degree, whether by referrals or otherwise.

Recommended

- Program counselors experience counseling and testing for themselves.
- Programs educate people outside of HIV services about counseling and testing (parks and recreation, pregnancy prevention service personnel).
- Health care professionals are given some training in client-centered counseling.

Definition and Description—Risk Assessment

Risk assessment counseling consists of a (usually one-on-one) meeting of the client with a trained counselor. It includes the assessment of person's risk for referral purposes, but also for the purpose of determining appropriateness of testing. Information is provided to the client based on individual needs. Counseling and testing services can be either anonymous, where the

client never gives a name, nor address to be filed; or confidential, where the client is guaranteed that identity and locating information will never become accessible to anyone outside of the immediate clinic or testing site.

Standards for Service Provision—Risk Assessment

Required

- Counselors take the following steps in each session:
 - Build rapport and trust to the extent possible;
 - Understand motivation of person to be tested;
 - Understand coping strategies to deal with results;
 - Assess client's support network when waiting for results;
 - Clarify meaning of test—confirm that client understands the difference between positive and negative results;
 - Give support for risk reduction—provide health education and promotion;
 - Explain the window period during which testing cannot provide reliable results.
- Counselors assess client's perceived risk for HIV:
 - Assess need for second risk assessment counseling session before test (based on client's coping skills, age, etc.).
 - Make sure that clients understand that a positive test result doesn't mean they are going to die—educate about good quality of life, treatment for prevention of certain problems.
 - Make referrals according to what a client needs and the type of care preferred (holistic, western, etc.).
 - Give enough information for clients to make their best choices, and understand the client may still have issues of distrust.
 - Make known the counselor's availability for ongoing counseling and support.
- Counselor negotiates small behavior change commitment while client is waiting for results.

Expected Impacts—Risk Assessment

- Increased knowledge of personal risk;
- Increased skills for behavior change or maintenance;
- Commitment for small behavior change;
- Knowledge of the individual appropriateness and limitations of the test;
- Preparation for results; and
- Knowledge of testing procedures at site.

Definition and Description—Result Disclosure Session

Disclosure sessions focus on giving clients their HIV test result, but also include provision of risk reduction counseling and referrals, and assistance with obtaining medical or other care. The primary purposes of post-test counseling are reinforcing a realistic perception of

risk, helping those with a negative result initiate and sustain behavior change, arranging access to necessary medical, prevention, and case management services for people with positive test results; and supporting HIV-positive clients in referring sexual or needle sharing partners for testing.

Standards for Service Provision—Result Disclosure Session

Required

- Counselors use the opportunity to review appropriate risk reduction techniques for individuals with negative results.
- Intervention includes an assessment of where the client is in the process of reducing the risk of HIV transmission.
- Counselors leave client with a phone number to call with more questions.
- All agencies providing CTRPN are part of a continuum of services to insure streamlining of referrals for further care.

Recommended

- Prevention case managers are available on site.

Expected Impacts—Result Disclosure Session

- Client will know result of HIV test.
- Clients with positive results will leave with at least one referral for medical, preventive, and/or psychosocial services.
- Clients with negative results will develop a relevant risk reduction plan.
- Clients with negative results will know where to go for relevant services.

Definition and Description—Referrals

Referrals provide individuals with resources appropriate to their particular needs at that time.

Standards for Service Provision—Referrals

Required

- Training of counselors includes: site visits to referral agencies; familiarity with staff, service system, and intake protocol of referral agencies.
- Counselor insures that the referral is current, accurate, user-friendly, and sensitive to the needs of that particular person.
- The need for referrals is assessed during pre-test counseling.
- Counselor insures that clients with positive results, as well as those with negative results who are at high risk, receive clear referrals.

- Counselors apprise clients of the advantages/disadvantages of referral sites.
- All referrals are sensitive to issues of age, race/ethnicity, gender, sexual orientation, etc.
- The special needs of youth are considered. While a youth's own consent is sufficient to gain services for a) pregnancy, b) contagious diseases, c) rape/sexual assault, d) drug/alcohol problems, e) mental health problems, f) AIDS/HIV (with an age limit of 12 or older for b, d, e, and f and none for a and c), there is still a question as to whether service providers will be comfortable serving them and will be aware of their particular issues. Such issues may include developmental issues, child sexual and/or physical abuse, neglect, abandonment, living without families, or having dysfunctional family and social lives.

Recommended

- Counselor offers one or two referrals at a time, rather than overwhelming client by distributing a large packet of materials.
- Counselor calls to make the first appointment for a referral, and subsequently follows up on the referral.
- Counselor provides a copy of risk assessment to client.

Expected Impacts—Referrals

- Client will access additional services.
- Client will experience a reduction in anxiety. This is an enabling action for the client, which helps her/him to regain control of her/his life.

Effectiveness of HIV Antibody Counseling and Testing

Outcome Effectiveness

The effectiveness of HIV counseling and testing on behavior change has been examined for several populations, mainly to inform the debate about the value of public and privately-supported wide-scale testing programs. Higgins et al. (1991) compiled and compared a group of studies examining the impact of counseling and testing of various population groups. Her findings support the assertion that while HIV counseling and testing programs are important, they should not necessarily be the center of HIV prevention efforts (e.g., Coates and Stryker, 1991).

Most of the studies cited in Higgins' report do not examine the effect of counseling but rather examine the effect of HIV testing or knowledge of serostatus. Many of the studies make no reference to whether the individuals received any counseling or if they did to what extent. A more thorough examination of the studies cited reveal that even those studies that did provide counseling vary from viewing a video to a didactic lecture format to extensive counseling. When studies are viewed in this context, it appears that when HIV counseling and testing affects behavior change it is because it is provided in a manner consistent with the recommendations provided by the Centers for Disease Control on "appropriate" counseling.

In a more recent review of the literature on prevention programs, Choi and Coates (1994) come to conclusions similar to those of Higgins. They posit, “HIV counseling and testing have a place in HIV risk reduction, but are not sufficient for HIV reduction. HIV counseling and testing do have impact on certain behaviors in certain populations. For example, HIV counseling and testing is associated with lowering sexual risk behavior among homosexual men and injection drug use among injection drug users. HIV counseling and testing with couples is associated with reductions in transmission among serodiscordant couples. However, HIV counseling and testing has not had an impact on pregnancy decisions among seropositive women. Only modest effects were demonstrated with STD clinic patients.”

Colón (1995) presented findings regarding the effectiveness of HIV antibody counseling and testing among street-recruited injection drug users. Among his sample, injection drug users who received a positive HIV antibody test result were more likely than those receiving a negative test result to change their sexual—but not drug use—behaviors. Study participants who received a positive test result were significantly less likely than those who received a negative test result to “report being sexually active (OR=0.27), and practicing unprotected vaginal sex with their main partners (OR=0.21).” The sexually active participants who had received a positive test result were also more likely than their HIV-negative counterparts to use condoms during vaginal (OR=4.16) and oral (OR=17.52) sex.

A study of women at community health clinics in Connecticut found limited effects of HIV counseling and testing on subjects' risk behaviors and psychological functioning related to HIV. While there appeared to be no change in sexual behavior, among women who were tested, there was a decrease in intrusive thoughts around HIV (Ickovics et al., 1994). Earhardt's (1995) review of effectiveness studies of counseling and testing and other individual counseling interventions targeting women, found it difficult to be conclusive about the impacts of these interventions on women. This was mostly due to study design issues and conflicting outcomes.

In a study of gay males in bars in small cities, HIV risk behavior was examined as it related to HIV antibody testing practices (Roffman et al., 1995). Researchers found that men who had been tested tended to be more sexually active, more likely to have sex with multiple partners, and engaged in more protected and low-risk sexual activities than men who were not tested. However, the tested men did engage in as much unprotected, high-risk behavior as did the nontested men. The authors offered two explanations for this: 1) men who have been tested, rather than reducing sexual activity as a means of avoiding risk, choose to adopt protective behaviors when engaging in higher risk activities; and 2) these men may also be “more likely to make distinctions about the contexts for anal intercourse with which condom use is either necessary or unnecessary” (e.g., with a long term partner who is HIV-). From this, the study authors concluded that increased safer sex practices were associated with HIV antibody testing at both the community and individual level. The implications of these findings, as proposed by the authors, is that HIV testing should be made more available to this population and policies should be established to “encourage test-seeking.”

Cost Effectiveness

One analysis conducted by David Holtgrave (1993), which utilized standard methods for cost-benefit analysis from a societal perspective (as opposed to a client or other viewpoint) found a benefit-cost ratio in HIV antibody testing of 20.09. This finding was based on several major assumptions used in the base-case analysis, including: 1) the assumption that without public funding, counseling, testing, referral, and partner notification (CTRPN) programs would not be provided; 2) the assumption that for every 100 HIV-seropositive persons identified and reached by CTRPN services, at least 20 new HIV infections are averted; and 3) the assumption that for every \$100 spent of direct and indirect costs of CTRPN services, an additional \$60 is spent on the ancillary costs of alerting people to HIV issues and to CTRPN availability. Additional benefits due to CTRPN services were ignored for the sake of model simplicity, such as the role of CTRPN in protecting the nation's blood supply; delayed morbidity and mortality due to early intervention; and the likelihood that HIV counseling provides an overall net reduction in risk for those who are found to be negative.

Sensitivity analysis showed that the benefit-cost ratio is greater than 1 for all considered cases. Such analysis indicated, for example, that it is important for persons who test negative to continue to be thoroughly counseled about HIV risk reduction and about maintenance of low risk behavior. Holtgrave's analysis strongly suggests that publicly funded CTRPN services result in a net economic gain to society. However, other research is necessary in order to determine whether, and to what degree, knowledge of HIV-negative serostatus may result in a small, net increase in risky behavior, as has been suggested by some investigators.

Another study (Nahmias and Feinstein, 1990), which, as the above, suggests that counseling and testing is only effective for individuals engaging in high-risk behaviors who change behaviors as a result of testing, arrives at a different conclusion. When looking at the cost-effectiveness of screening the general population for HIV, the study found that the cost of detection varies inversely with the prevalence rate, and that the exact relationship is hyperbolic. For example, when the prevalence rate is one in 20, the cost per detected case is approximately \$750; when the prevalence rate is one in ten, the cost is approximately \$400; and when the prevalence rate is one in four, the cost is approximately \$200. A program in Illinois that mandated prenuptial HIV screening, for example, detected 26 cases of HIV infection out of 155,458 total persons tested. The cost of detecting a single HIV infection in this population was thus at least \$208,000. Screening programs applied to persons engaging in high-risk activities would be more likely to be cost-effective.

On the other hand, it should also be noted that a focus group of HIV-positive women conducted as part of the year one California State Planning process found that approximately half of the women participants had not been aware when they took the HIV antibody test that they were at any risk for HIV infection. Testing of these women would not have been considered cost-effective, yet clearly they had much to gain from taking an HIV antibody test.

Suggested Uses

Advantages/Strengths

CTR is universally applicable, although different groups may be reached through anonymous and confidential testing or through different testing venues. The factors to consider for targeting CTR include:

- timing;
- venue;
- staff representation of the community;
- accessibility of site;
- mobility of CTR;
- drop-in vs. appointment-based services; and
- anonymous vs. confidential services.

Note: There is some debate over the most appropriate environment for CTR (e.g., a site created just for HIV CTR or a primary care facility) and the most appropriate kind of provider (e.g., a primary care physician—doctor or nurse—or an HIV testing counselor). The primary care context may be more appropriate for communities in which there is more stigma attached to HIV and/or a greater likelihood that people will seek care from a single provider and for general health concerns. It is important, however, to ensure that doctors or nurses providing test results are fully trained to do the counseling and referral work for their clients (training of all CTR providers should be ongoing and central to the program).

- CTR can function as a method of HIV prevention; it becomes part of a regimen of health care.
- CTR will be most inclusive when a provider offers both anonymous *and* confidential services.
- Services can be most inclusive when a provider offers both appointment-based *and* drop-in counseling, testing, and referral.

Considerations

- CTR may have fewer benefits for people in a situation of total isolation and lack of social support.
- CTR may have fewer benefits for people in an early stage of recovery from substance abuse (although CTR can become part of the recovery process, if it is done properly and/or the client responds well).

Anonymous Versus Confidential Counseling Testing and Referral

A helpful way to present suggested uses of CTR is to consider anonymous and confidential CTR separately. In addition, location can be another distinguishing factor. The ability of an agency to provide anonymous or confidential services depends partly on the

recordkeeping standards of the agency. Some providers encourage clients to use false names for testing records, allowing for a kind of middle ground between confidentiality and absolute anonymity. It should be possible for a service provider to use client names for some services and still use an anonymous records-keeping system for HIV testing.

Advantages/Strengths—Confidential Testing

- Confidential services expand the possibilities for follow-up and case management of the testing client. With youth and pregnant women, for example, it may make more sense to focus on confidential testing and the capability for referral to services.

Advantages/Strengths—Anonymous Testing

- Anonymous testing serves the needs of clients who fear the repercussions of reporting of their HIV status, or who simply do not want their name on record.

Location

- A mobile testing unit can be effective for targeting clients with low perception of risk in the venues they frequent.

Partner Notification (PN)

Definition and Description

Partner notification is a traditional disease control intervention used in fighting sexually transmitted diseases. It involves public health officials taking responsibility for locating and notifying the sexual and needle sharing partners of people who have tested positive for HIV.

Standards for Service Provision

Required

- Partner notification is performed by public health disease control specialists that routinely provide STD PN. They can add HIV to the STDs for which they do PN.
- The voluntary nature of clients' acceptance of this service is a central component.
- All PN services are confidential.
- PN services are offered city-wide.
- Antibody test counselors offer PN to all clients.
- Partner notification involves counseling and education about HIV/AIDS including the following:
 - HIV basic information;
 - Incubation/window period;
 - Risk assessment/plan for risk reduction;
 - Offer of testing or referrals to testing; and

- Condom and dental dam distribution, demonstration.
- PN services are provided some evenings and weekends.

Recommended

- PN service is provided in as many languages as possible including, but not limited to, Spanish, Tagalog, Cantonese, Vietnamese, Mien, Hmong, Mandarin, and any other language that might be spoken by partners of HIV-positive clients.
- Partner notification takes an active approach to prevention.

Expected Impact

- All partners will receive knowledge that they may have been exposed to HIV and will be offered or seek determination of HIV status if status is unknown.

Effectiveness

Outcome Effectiveness

Several researchers have conducted evaluations of partner notification programs. A study of partner notification in North Carolina found that provider-referral notification was more successful than the patient-referral method. Half of provider-referral group were notified compared to only 7% of the patient referral group. The study was limited by the large number of tested individuals who declined to participate. The authors also note that the effectiveness of partner notification can be limited by those who test positive and do not return for their results (Landis et al., 1992)

A retrospective analysis of partner notification services in Colorado found that patients referred only 20% of eligible partners compared to 71% referred by the provider. Heterosexual men referred a greater proportion of partners through patient referral than did gay men. The proportion of patient referrals among White patients was higher than that of Latino and African-American patients (Spencer et al., 1993).

In a different Colorado study, Hoffman et al. (1995) compared the effectiveness of partner notification services of an anonymous test site with those of confidential test sites. The researchers found that confidential test sites were 30%-50% more likely to have notified and counseled the partners of HIV-positive clients. While there was no tracking of the ATS clients' rate of partner notification on their own, the authors cite other research that found that patient-referral partner notification was less effective than provider-referral notification.

Regarding the cost-effectiveness of partner notification, James Kahn's (1995) analysis found this type of service to be a cost-effective approach to HIV prevention in terms of its cost per HIV infection averted.

Suggested Uses

Partner notification is generally applicable for anyone wishing to inform partners of their positive HIV status. By design, it targets people who are at risk as partners; and it may often be the only means by which people in this group become informed of their risk.

Advantages/Strengths

- Partner notification is especially valuable for anyone who wishes to notify a partner who is not currently in their life or who may have a violent or abusive reaction to hearing the news directly from the client.
- The intervention can be done by the service provider alone, or can be done jointly by the service provider and the client, depending on what is more comfortable and safe for the client.
- Partner notification is always an in-person service, allowing for on-the-spot counseling/referrals.

Considerations

- Partner notification can only reach those partners mentioned by the clients who wish to use the service.

Needle Exchange Programs

Definition and Description

Needle exchange programs provide sterile needles to injection drug users and hormone, steroid, vitamin, and insulin users. Needle exchange programs are community or street-based.

A variety of factors may limit the effectiveness of needle exchange programs, including a lack of resources and of information in target communities about existing services. Providers note that overall only a fraction of IDUs use needle exchanges. And IDUs who would utilize needle exchange programs do not always know how to access them. For example, some IDU focus group participants in the Tenderloin are not aware of the schedule for needle exchanges and do not realize the service is available in their general neighborhood almost daily. In addition, providers note that IDUs do not always consider needle exchange sites to be safe. Providers say IDUs fear that law enforcement officials or social service authorities will intercept them at needle exchange sites. Providers also say that some women IDUs fear their children will be taken from them if they participate in needle exchange programs.

Standards for Training and Service Provision

Required

- Sites are adequately staffed. This includes staff for volunteer coordination, provision of materials, and other elements of the program.
- Program provides incentives so that volunteers continue to play important role.
- Programs integrates volunteers into all activities of needle exchange.
- Standard volunteer training manual is developed which covers all duties of the job and addresses safety issues, harm reduction theory, infection control/universal precautions, and violence prevention.
- Each site has a designated health education and referral and resource person.
- Health education messages are most effective when simple, clear, concise, and consistent.
- Program offers referrals based on request of client.
- Condoms, dental dams, and information on safer sexual behavior are available at all sites.

Recommended

- Program meets the safety needs of clients (in terms of both keeping down police presence, so as not to scare away clients, and having a protective, vigilant staff to prevent clients from causing problems for each other).
- Community based organizations could work with a needle exchange site to provide prevention education, if appropriate.
- A site can be developed specifically to serve the needs of a particular neighborhood.
- Program can provide a bridge to drug treatment when appropriate; this linkage/collaboration of needle exchange and recovery services should extend beyond the giving out of a treatment provider's phone number (it might involve offering passes, which reserve a treatment spot, to interested needle exchange clients).
- Needle exchange may also serve as a bridge to CTRPN services.

Expected Impacts

- Individuals will exchange used syringes for clean syringes.
- Individuals will have referrals for services requested.
- Participants will know the time, day, and location of needle exchange services.
- Individuals will know how HIV is transmitted through needle use and through sexual behavior.

Effectiveness

Outcome Effectiveness

An extensive evaluation of needle exchange programs has been conducted and described. The majority of studies demonstrate decreased rates of HIV drug risk behavior through needle exchange, but not sexual risk behavior. Available quantitative data do not provide evidence that

NEPs change overall community levels of drug use (Lurie and Reingold, 1993). There is also evidence to suggest that laws restricting access to syringes can potentially increase HIV infection rates.

The U.S. General Accounting Office (GAO) examined studies of nine needle exchange programs that had published results assessing the impact of their NEP interventions. According to the GAO, “Only three of these had findings based on strong evidence. Two of these three reported a reduction in needle sharing while a third reported an increase” (United States General Accounting Office, 1993).

Meanwhile, seven of the nine projects examined by the GAO looked at whether NEPs led to increased injection drug use. Five had strong evidence to report on these outcomes, and according to the GAO, “All five found that drug use did not increase among drug users; four reported no increase in frequency of injection; and one found no increase in the prevalence of use” (United States General Accounting Office, 1993). The GAO also found that the forecasting model developed at Yale University was sound and credible. “The model estimates a 33 percent reduction in new HIV infections among New Haven, CT needle exchange program participants over 1 year” (United States General Accounting Office, 1993).

In summary, the GAO noted that, “Data from several projects support the view that needle exchange programs are reaching injection drug users and referring them to drug treatment or other health services.” That is, NEPs assist injection drug users in obtaining services that may address core issues behind their risk behavior. However, although NEPs make referrals, there are not always available slots in drug treatment programs to accommodate them (United States General Accounting Office, 1993).

The Panel on Needle Exchange and Bleach Distribution of the National Research Council and the Institute of Medicine also examined the wide body of scientific literature on effectiveness of these programs. The panel concluded that “needle exchange programs should be regarded as an effective component of a comprehensive strategy to prevent infectious disease.” The scientific evidence showed that needle exchange programs lowered the fraction of contaminated needles in circulation, thereby reducing the risk of infection. In addition, the panel found “no credible evidence to date” that needle exchange programs were associated with increased drug use or increased frequency of injection among participants (Normand, Vlahov, and Moses, 1995).

Other research supports these findings. A study of a San Francisco needle exchange program found that clients reported positive changes in their risk behavior as a result of participating in the exchange. In addition, more frequent use of the exchange program was significantly related to less frequent use of a single syringe and fewer sharing partners. Similarly, in a descriptive analysis of San Francisco’s NEP, Guydish and colleagues (in press) found that, “(NEP) Clients who received a higher proportion of their needles from the exchange were less likely to report sharing of needles or rinse water” and “Clients who attended the exchange more frequently were more likely to clean their skin prior to injecting and less likely to

use the same needle repeatedly.” Researchers conclude that the program was successful in reducing risk behavior but not in eliminating it (Guydish et al., 1995).

Watters et al. (1994) evaluated a syringe exchange program in San Francisco. The authors reported that the program was especially effective for IDUs younger than 40, whose use of the NEP showed the strongest association to not sharing needles. An evaluation of a needle exchange program in New Haven, CT by Heimer et al. (undated manuscript) found that the program had reduced the circulation time of syringes in the community. The authors also estimated that transmission of HIV among program participants was reduced by one-third. Finally, participants in the Tacoma Syringe Exchange showed significant declines in needles and syringe sharing. In addition, the study found an increase in the average number of times participants used bleach to clean needles (Hagan et al., 1991).

Many IDU focus group participants in San Francisco say they regularly exchange needles. In addition to preventing new HIV infections, IDU focus group participants credit needle exchange programs with providing them access information about other services such as detox programs. Additionally, Wenger and Murphy (1995) reported, based on an ongoing qualitative evaluation of San Francisco’s NEP, that “expansion of services and legislative reform are both necessary in order to increase IDUs access to sterile injection equipment and subsequently decrease their risk for HIV infection.”

Cost Effectiveness

James Kahn, MD, MPH, of the Institute for Health Policy Studies, UCSF, has examined models for determining the cost-effectiveness of NEPs using different models and various assumptions. He found that in almost all cases the cost per HIV infection averted is far below the \$119,000 lifetime cost of treating an HIV-infected person. Estimates range from \$3,773 to \$12,000. (Lurie and Reingold, 1993). The median annual budget of U.S. and Canadian needle exchange programs is relatively low, at \$169,000, equal to the cost of about 60 methadone maintenance slots per year (Ibid.).

In a summary of cost-effectiveness data of HIV Prevention in the U.S., researchers found that two studies of needle exchange programs showed that the cost per HIV infection averted was less than the average care costs of HIV disease for a person. One study found costs to be as low as \$3,000 per infection averted (Kahn, 1995).

Hernandez and colleagues (1996) compared the cost of medical treatment for HIV infected IDU jail inmates with the cost of an NEP in San Diego, CA to explore recommendations for reducing local government spending on law enforcement. They found that, “The excess medical cost for treating HIV-positive IDUs (compared to HIV-negative IDUs) was \$15,768 per person or \$5.3 million for all infected IDU (inmates).” Given that the annual operational costs of San Diego’s NEP is \$14,000 to provide 2,500 clients with clean needles, they conclude that, “Legalization and expansion of the current San Diego underground NEP has the potential to produce savings for law enforcement.”

Mathematical models of needle exchange programs “suggest that needle exchange programs can prevent significant numbers of infections among clients of the programs, their drug and sex partners, and their offspring. In almost all cases, the cost per HIV infection averted is far below the ... lifetime cost of treating an HIV-infected person” (The Public Health Impact of Needle Exchange Programs in the US, 1993).

Suggested Uses

Advantages/Strengths

- Needle exchange programs can be useful for the transgendered community, and for other people who inject steroids or vitamins, as well as for IDUs.
- Compared with pharmaceutical outlets, needle exchange programs are more appropriate for higher-risk populations, which may require ancillary services and other prevention tools.

Considerations

- Needle exchange is inappropriate in the context of a 24-hour residential treatment program. There is also still some question of its appropriateness for clients who are in other kinds of drug treatment programs.

Hotline

Definition and Description

A hotline is a confidential telephone service functioning as an education/referral/help line for anonymous callers. Hotlines offer up-to-the-minute information on HIV and related issues, crisis intervention and counseling, and direction to other social services, as appropriate to client need. Hotlines have the advantages of targeting a wider geographical area than most interventions and being able to reach a greater, more diverse, and sometimes isolated population.

Standards for Service Provision

Requirements

- Provide ongoing training for hotline operators in HIV, crisis intervention, substance use issues, legal issues, counseling for child abuse, sexual abuse, incest, battering, and emotional abuse, STDs, and cultural competence.
- Staffed by culturally diverse, representative, and competent individuals.
- Provide brief call documentation (records of call content and the demographic positioning of callers, for example).
- Include a well-developed and frequently updated system of referrals.
- Promote and reinforce help-seeking behaviors.
- Provide consistent prevention messages among agency staff.

- Keep up-to-date with current prevention knowledge.

Recommendations

- Offer languages appropriate to the targeted population through staffing or linkages to other resources.
- Provide prevention messages consistent with other organizations.

Expected Impacts

- Linkage of callers to various agencies/resources, including but not limited to those dealing with HIV;
- Increased knowledge and debunking of misinformation;
- Risk assessment;
- Crisis intervention; and
- Anxiety reduction—enabling action on the part of the caller, helping her/him to regain control of her/his life.

Effectiveness

Outcome Effectiveness

While hotlines may have limited usefulness in directly promoting behavior change (and indeed, as mentioned earlier, this is not their principal stated purpose), they are very useful in disseminating information, particularly to people who are geographically isolated, and to people who might otherwise not seek services. Hotlines are often a first link to other prevention and care services, and are a useful informational and supportive access point to individuals in crisis or with questions, such as individuals who have just learned of a friend or relative's HIV status and do not know where to turn for HIV-related information or support. Studies show that although knowledge is not sufficient to cause behavior change, it is a necessary basis for behavior change to take place (Stall, Coates, and Hoff, 1988).

While no formal studies of hotlines were found, a survey of repeat callers to the Southern California AIDS Hotline indicated that the hotline was effective as a prevention strategy. Fifty percent of callers reported that they had increased their practice of safer sex, and 37% reported no change in their practice of safer sex. For 72% of all callers, the hotline had been the only source of HIV/AIDS information since their last call (AIDS Project Los Angeles, 1993).

Cost Effectiveness

Hotlines are rarely inexpensive to run and maintain, particularly when they exist to serve wide geographic regions. On the other hand, their per unit cost is low, largely because volunteers are most often utilized to provide the actual answering of phone lines. While the direct impact of hotlines on averting new HIV infections is uncertain, they are probably cost effective even if they avert only a few infections.

Suggested Uses

Hotlines are widely applicable to all groups at risk for HIV.

Advantages/Strengths

- Hotlines are especially helpful for people in crisis and/or people needing basic information and answers.
- Hotlines are particularly appropriate for groups requiring support and/or anonymity.

Considerations

- Hotlines are not appropriate for people without access to telephones (or do not have change, if the hotline is not a toll-free number).
- Hotlines cannot reach people who do not comfortably speak the language(s) offered.

SMALL GROUP INTERVENTIONS

Small group interventions involve the delivery of prevention services to a group of two or more individuals.

Single Session Group Workshops

Definition and Description

A single session group workshop consists of a one-time, intensive session or gathering focusing on information about HIV (e.g., transmission and behavior change), motivational activities, and skills-building. It may also touch on other relevant issues. This intervention can take a variety of forms, such as involving impromptu groups, using vans as session sites, and before/after bar groups. The specific intervention is planned or requested, usually based on advertising or promotion of the availability of the service.

Standards for Service Provision

Requirements

- Facilitated by a trained facilitator or professional, selected also for her/his cultural competence.
- Includes ground rules created and adopted by participants.
- Provides the opportunity for confidential, one-to-one interaction with the provider before or after the intervention.
- Includes an evaluation component that is completed by workshop participants.
- Addresses the level of need in the target population around knowledge, behavior, and skills.
- Provides referrals and resources for follow-up.

Recommendations

- Provides, when appropriate, a referral/resource to clients during outreach.
- Provides incentives appropriate to the workshop and the target population—especially important for hard-to-reach groups.
- Draws people in with other (not directly HIV-related) activities.
- Includes hands-on activities (such as role plays).
- Provides additional support, follow-up groups, and/or “booster” groups.
- Is multi-issue (e.g., addresses racism and enact community building).

Expected Impacts

- Increased HIV knowledge and debunking of misinformation;
- Knowledge of services/community resources;
- Development of skills for risk reduction (e.g., negotiation skills or practical application of latex barriers) that are relevant to the target population;
- Intent to change or maintain behavior to prevent HIV transmission or reinfection (e.g., safer sex or needle use); and
- Increased motivation to participate in HIV prevention activities.

Effectiveness

Outcome Effectiveness

According to service providers, multi-session group interventions have a greater impact on participants than single-session interventions. Providers note, however, that single-session interventions are also effective and give access to members of target populations who would not attend multi-session programs. Group interventions are more effective when they address other social or personal issues such as racism, domestic violence, or poverty, providers say.

There are many studies evaluating the effectiveness of group presentations as an HIV prevention strategy. Presentations that emphasize skills for behavior change and that are interactive are more effective than those that simply rely on the didactic transfer of information. The effectiveness of the didactic transfer method for information is still uncertain. Some studies say it does affect behavior, while others claim that it does not. It is safe to say, however, that basic information on HIV transmission and prevention is an essential element for changing behavior.

A study of African-American male adolescents from Philadelphia found that a one-time, five-hour intervention designed to increase AIDS-related knowledge and weaken problematic attitudes toward risky sexual behavior was effective. Compared to a control group, at a three-month follow-up assessment, the intervention group had higher AIDS knowledge, weaker intentions to engage in unsafe sexual activity, and reported engaging in less risky sexual behavior in the three months following the intervention. “Adolescents who received the AIDS

intervention were less likely to engage in sexual activities, and those who did were more likely to engage in safer sexual activity” (Jemmott, Jemmott, Fong, 1992).

Conversely, “Calabrese, Harris, and Easley (1987)...found that neither attendance at a safe sex lecture, reading a safe sex brochure, receiving advice from a physician about AIDS, testing for HIV antibodies, nor counseling at an alternative test site were associated with participation in safe sex.” (Stall, Coates, and Hoff, 1988).

Two one-day peer-led interventions for gay and bisexual men in Philadelphia were evaluated. Intervention I, a small group AIDS 101-type lecture was less effective in increasing condom use than Intervention II, which included skills training utilizing role play and group process. Although Intervention II was more effective, both interventions increased condom use for insertive anal sex, but neither had an effect on receptive anal sex (Valdiserri et al., 1989).

A project in Los Angeles that used peer leaders for 4 to 15 gay and bisexual men in groups lasting several hours found that subjects “improved in terms of knowledge, attitudes, and behavioral intentions.” (Institute for Policy Studies, 1993).

A didactic slide/tape presentation to Vietnamese women, led by a Vietnamese nurse at a Women, Infants, and Children health program in Los Angeles, was successful at increasing knowledge and positively influencing intended practices (Flaskerud and Nyamathi, 1988).

Choi and colleagues (1996) demonstrated that single session, brief group counseling sessions were effective among their study sample of self-identified homosexual Asian/Pacific Islander men in San Francisco. They found that, regardless of ethnicity, “Significant reductions in number of sexual partners were observed.” Additionally, “Chinese and Filipino men further benefited from the intervention: treatment subjects from these two ethnic groups reduced unprotected anal intercourse at follow-up by more than half when compared to their counterparts.”

Effectiveness of one-time condom skills training sessions for women at risk was difficult to assess based on several studies reviewed by Earhardt et al. (1995). Fewer women were found to have multiple partners, but the effect on condom use was inconclusive. These authors also reviewed two studies of single session relational skills interventions for STD clinic patients, neither of which found impacts on STD reinfection rates.

In a Seattle study of injection drug users, researchers found that a 90 minute educational intervention did not appear to impact the participants’ involvement in high-risk behaviors. There were no significant differences between those who had received the intervention and those who did not at the four month follow-up (Calsyn et al., 1992).

Suggested Uses

Advantages/Strengths

- Single session interventions can be run as one-time skills-building workshops, especially for those people who have been assessed as having knowledge, attitudes, and beliefs favoring risk reduction, but have not changed behavior.
- The single session format can be beneficial for groups that cannot commit to multiple sessions (agencies should indicate why their clients cannot commit to multiple sessions).
- A one-time presentation can serve as a first step or launching pad for clients' other prevention-oriented activities, if it focuses on creating linkages.
- Single session presentations can be good for populations at lesser risk that have fairly good information, but want to build awareness and sensitivity (e.g., friends, family, or employers of people with HIV); and can be designed specifically to educate people who might become educators or advocates.
- A single session group can clarify to people at low risk that they **are** at low risk, and in this way reduce the demands made on testing centers by people who are just worried about HIV in an unspecified way, not having to do with any actual risk behaviors.
- Single session groups may be provided in mobile vans, as an effective way of accessing higher-risk groups in their venues.

Considerations

- Single session groups are less helpful for people with serious mental health issues.
- A single session intervention may also be less beneficial/less feasible for the highest-risk populations and those most in denial (agencies should demonstrate the acceptability/feasibility of the single session group intervention to their target population).

Multiple Session Group Workshops

Definition and Description

Multiple session group workshops are a series of workshops/groups/meetings introducing HIV issues and linking them to other life issues not as easily or immediately understood as relating to HIV. Workshop topics usually build on each other from session to session. Groups may be closed or drop-in, mixed or serostatus-specific, structured or need/issue-driven groups for risk reduction and psychosocial support. Multiple sessions provide an opportunity to go into greater depth about HIV risk reduction issues and strategies, and this format provides enhanced opportunity for behavior change. The intervention can draw people in with other (not directly HIV-related) activities. Groups can be held in vans or run as before/after bar groups.

Standards for Service Provision

Requirements

- The intervention is conducted at locations and times convenient and safe for the target population.
- Sessions are facilitated by a trained facilitator or professional, selected also for her/his cultural competence.
- Sessions include ground rules created and adopted by participants.
- Provides the opportunity for confidential, one-to-one interaction with the provider before or after the intervention.
- The format includes hands-on activities (such as role plays).
- The sessions incorporate practical, useful skills building exercises or demonstrations based on needs of the target population.
- The intervention appropriately addresses the psychocultural and multiple issues not necessarily directly related to HIV, and continually identifies additional community needs and issues to be addressed.
- The program includes an evaluation component that is completed by workshop participants.
- Facilitators or other staff provide referrals and resources for follow-up.

Recommendations

- The program provides incentives appropriate to the workshop and the target population, especially important for hard-to-reach groups.
- The program provides additional support, follow-up groups, and/or “booster” groups.
- The program has counselors available for follow-up (especially at six months, to evaluate the adoption and/or maintenance of safer behaviors).

Expected Impacts

- Extensive knowledge of HIV/STDs;
- Extensive knowledge of services/community resources;
- Behavior change or maintenance to prevent HIV transmission or reinfection (e.g., safer sex or needle use);
- Health-promoting attitudes, such as realistic perception of personal risk for HIV;
- Development of skills for risk reduction (e.g., negotiation skills) that are relevant to the target population; and
- Increased motivation to participate in HIV prevention activities.

Effectiveness

Outcome Effectiveness

There are many data suggesting that multi-session groups can be very effective at changing the risk behavior of group participants, and certainly at changing their level of knowledge. Multiple sessions have a greater possibility of effecting consistent behavior changes than one-time interventions. They also have more potential to deal with the underlying causes of unsafe behavior. Multiple session groups, however, can be only as effective as the facilitator or teacher who leads them. A facilitator or teacher who is not trained in AIDS education, or is not comfortable speaking frankly about sexuality and drug or other needle use, cannot lead an effective HIV prevention program.

A study of a two-session classroom AIDS education program involving seventh and tenth grade classes in Rhode Island showed positive results. "Following instruction, students reported more knowledge, greater tolerance of AIDS patients, and more hesitancy toward high-risk behaviors, but the changes were modest" (Brown, Fritz, and Barone, 1989). Similar results were found in a school-based AIDS prevention program presented in an inner-city school in Northern California serving predominately African-American and Asian students. In this population, however, changes in high-risk behaviors could not be detected, perhaps due to the small number of sexually active students (Siege et al., in press).

A study of an open-enrollment, pass/fail course at UCLA in 1988 showed positive impact on students' AIDS-related knowledge, attitudes, and behaviors. Compared to a control group, the students who took the lecture course changed their attitudes about critical public policy issues (e.g., mandatory HIV testing) to be in line with current public health policy. "The nature of the effect was to bring students toward greater appreciation of 'individual rights'." "Students were not likely to carry and use condoms subsequent to participation in the course. Conversely, though not statistically significant, students in the class were also perhaps less likely to engage in unprotected vaginal sex" (Abramson, Seckler, Berk, and Cloud, 1989).

An evaluation of an AIDS intervention program at a shelter for homeless adolescents in New York demonstrated significant increases in condom use and decreases in risky behavior. The intervention had no effect on abstinence. The intervention focused on skills training, behavior self-management, and group and social support from peers (Rotheram-Borus et al., 1991).

A study of African-American gay and bisexual men in San Francisco demonstrated that men who participated in multiple session groups had higher levels of behavior change, and maintained behavior change over time more successfully than those who attended single session groups (Peterson, 1993).

DiClemente and Wingood (1995) evaluated a randomized control trial of an HIV sexual risk-reduction intervention for African-American women between the ages of 18 and 29 years. Women were randomly assigned to either a five session social skills intervention, a single

session HIV risk-reduction intervention, or a delayed HIV education control condition. The social skills sessions differed from the HIV risk-reduction intervention not only in number of sessions but also in substantive topics addressed. In addition to HIV risk-reduction information, the social skills intervention “emphasized ethnic and gender pride, sexual self-control, sexual assertiveness and communication skills, proper condom use skills, and developing partner norms supportive of consistent condom use.” Their findings indicate that, “Compared with the delayed HIV education control condition, women in the social skills intervention demonstrated increased consistent condom use, greater sexual self-control, greater sexual communication, greater sexual assertiveness, and increased partners’ adoption of norms supporting consistent condom use.”

An evaluation of a six-session skill-building intervention conducted with high school students demonstrated that this approach was effective in increasing STD and AIDS knowledge and increasing skills to prevent risky sexual behaviors, but not drug use behaviors (Shafer and Boyer, 1991).

In a review of NIMH sponsored research on prevention interventions, the authors outlined several studies that found that multiple session group workshops were successful in reducing high-risk behavior in gay men, women of color, and homeless youth. In particular, reported condom use was much higher for workshop participants than for control groups. These workshops included skill building for assertiveness, relationships, and social support. Multi-session interventions that included a cognitive-behavioral component showed more success in increasing condom use among African-American youth than a single session information only intervention (Office of AIDS et al., undated manuscript).

Reviewers also found that participants in a multiple session intervention with the mentally ill, while showing success in increased knowledge and intention to use condoms immediately following the intervention, were not able to sustain these changes. The authors also note that these participants were all motivated individuals, who were willing to attend the sessions. (Office of AIDS et al., undated manuscript)

In their review of interventions for women at risk, Earhardt et al. (1995) found evidence that interventions that involved three or more sessions and whose skill-based content was targeted specifically to women (as opposed to men and women) were more successful in reducing high-risk sexual practices, at least in the short term, compared to information-only interventions. Positive results were found for IDU women or sex partners of IDUs and at-risk, inner-city or low income women.

For injection drug users in treatment, participants in an enhanced, six session intervention on HIV education showed better ability to make decisions about risky behavior immediately following the intervention than participants receiving a single session information intervention. However, follow-up data did not reflect significant differences in behavior among the two groups (McCusker et al., 1992).

Kelly et al. (1994) were able to demonstrate behavior changes in female patients at an urban clinic who received a five session workshop on HIV/AIDS risk reduction. Participants

showed significant changes in condom use and sexual communication and negotiation skills at a three-month follow-up. A comparison group receiving health education on other topics showed no change after three months.

Gay and bisexual adolescents participating in an HIV prevention intervention showed changes in their practices of unprotected anal and oral sex. These changes were pronounced for African-American youths (Rotherum-Borus et al., 1994).

In addition to the research on HIV prevention interventions, studies on health education interventions for other health concerns also show the effectiveness of a multi-session approach. For example, patients participating in a six session educational program on cardiovascular health demonstrated greater improvements in their lifestyle and diet than did patients receiving the “usual advice” from a health care provider (Lindholm et al., 1995).

Suggested Uses

Advantages/Strengths

- Multi-session groups are most applicable for people with high perception of personal risk.
- The intervention is most useful for people who are already highly motivated to attend groups.
- Structured groups may provide a needed/desired structure for some populations (e.g., some homeless and/or jobless people).
- Multiple session groups attract people who perceive themselves to be part of a cultural group or community, and who are seeking connection with others who have shared experience and interests.
- Services may be utilized more fully by women, who tend to take advantage of discussion and support groups and to work well with relational models.
- The group sessions can also be the first opportunity for people who are unaccustomed to engaging in group activities or to talking about sexual and drug-related behaviors with their peers.
- Multiple session groups can draw MSMs (many older and Latino MSMs, for example) who are seeking social contacts and support outside of the gay bar scene.
- Group sessions are especially feasible and easy to integrate when conducted in institutional settings (e.g., youth in schools, clients at in-house treatment centers, and incarcerated persons).

Considerations

- Group sessions tend to be more helpful to participants if they are interactive rather than didactic.
- Providers can encounter difficulty in trying to retain participants for continuing groups; they may require a “hook” other than HIV prevention alone, to motivate regular attendance (Note: this is absolutely essential for youth participation).

- Multiple group sessions may not be feasible for people with limited free time (e.g., people who are struggling to hold onto housing/employment or juggling house, kids, education, work, etc.).

COMMUNITY LEVEL INTERVENTIONS

Community based approaches to behavior change provide information and skills on the community level to change behavior and encourage a supportive social environment through channels and methods that are indigenous to the community. Community-level efforts are also designed to create structures and systems which assist in the maintenance of healthy behaviors. These interventions are based on several theories including Social Learning Theory, the Health Belief Model, Attitude Change Theory and Diffusion Theory (Coates and Greenblatt, 1990).

Speakers' Bureaus

Definition and Description

Speakers' bureaus bring together individuals who have been impacted by the HIV epidemic, to speak to groups of people, communities, or organizations. Participants in a speakers' bureau could include, but are not limited to, people living with HIV disease, their family members, their friends, their significant others, health educators and service providers, etc. Presentations involving speakers can be interactive, and can be in single or multiple session formats.

Standards for Service Provision

Required

- Panels include any of the following types of speakers: people living with HIV/AIDS; HIV/AIDS service providers; or friends, family, and significant others of people with HIV/AIDS (all people affected by the epidemic, from a range of social positionings and perspectives).
- Speakers are trained in basic HIV/AIDS/STD knowledge.
- Support mechanisms are provided for speakers such as honorariums or emotional support, as needed.
- The site is comfortable and safe to all participants.

Recommended

- Whenever possible, speakers should be members of the target population of the audience.
- Speakers can provide referrals to agencies, hotlines, and community information resources.

Expected Impacts

- Increased sensitivity to and destigmatization of HIV/AIDS;
- Increased HIV/AIDS knowledge (about prevention, AIDS 101, antibody testing, treatment, etc.) and debunking of misinformation;
- Boosted emotional support and self-esteem of the participants;
- Attachment of human faces and stories to audience conceptions of the epidemic; and
- Increased motivation to participate in HIV prevention activities.

Effectiveness

The Council was unable to find research documenting the effectiveness of speakers' bureaus as an HIV prevention intervention.

Suggested Uses

Advantages/Strengths

- Speakers' bureaus are accessible to people at a low literacy level.
- The intervention can be helpful for people needing basic information about HIV.
- Speakers' bureaus can have an impact on people who don't know anyone with HIV (or think they don't).
- The speakers can serve as a denial-breaker for people with low perception of personal or communal risk.
- Speakers can work well with people in institutional settings such as school, jail, etc.

Considerations

- Speakers' bureaus are not as appropriate for people with multiple issues or mental health stressors.
- A panel of speakers is generally not sufficient as the only intervention provided to a group—they should not be done in isolation from other prevention activities.

Media

Definition and Description

Media is a form of communication that can reach large numbers of people with motivational and educational messages. These messages can be designed to reach mass audiences, small and location-specific audiences, or culturally and communally specific audiences. Different types of media include:

- **Large media** can include television (documentaries, talk shows, commercials, PSAs, etc.), radio (PSAs, public talk shows, etc.), and print (newspapers, magazines, etc.).

- **Small media** can include materials development (brochures, pamphlets, fact sheets, posters, palm cards, videos, audio tapes, etc.).
- **Other media** can include billboard advertising, computer services (Internet, bulletin boards, etc.), and telephone services (hotlines, talk lines, etc.).

Large media campaigns often require a substantial amount of funds, and therefore many grassroots movement-type organizations cannot afford to sponsor them, but small media can be very cost-effective and affordable.

Several concerns about current media campaigns emerged from San Francisco focus group data:

- Some focus group participants report being overwhelmed or confused by the variety and inconsistency of media messages. For example, messages concerning the safety of oral sex sometimes are confusing or inconsistent.
- Many focus group participants complain that media efforts do not depict peers of target group members. For example, African-American gay male focus group participants complain that posters only show White people or don't show male couples.
- Media providers note that media messages must be strong to compete for the public's attention. Desensitization of the public from exposure to many strong messages, however, is a countervailing concern. Providers note that messages are most effective when they are emotionally or intellectually engaging.

Standards for Service Provision

Required

- Media developed is relevant to the target populations, through a needs assessment and design process including community participation.
- To engage a particular population, providers say media messages should be integrated with other issues and activities of the targeted group. The target population also should be involved in planning and implementing a media campaign.

Expected Impacts

- Increased sensitivity to and destigmatization of HIV/AIDS;
- Increased HIV/AIDS knowledge (about prevention, AIDS 101, antibody testing, treatment, etc.) and debunking of misinformation;
- Informing of people, communities, and organizations about local resources and referrals; and
- Increased motivation to participate in HIV prevention activities.

Effectiveness

Outcome Effectiveness

Media, both general and that directed at specific subgroups in the communities, is influential in teaching about the health risks associated with specific behaviors (Coates and Greenblatt, 1990). According to published research and other data, media campaigns with culturally-appropriate messages effectively convey prevention information and change behavior when funding exists to sustain them over time (Coates and Stryker, 1994). An analysis of injection drug users' use of media and source of HIV information in Baltimore concluded that media could reach IDUs with AIDS prevention messages, particularly through television (Jason et al., 1993).

In their paper on HIV prevention and mass media campaigns, Schechtel et al. (undated manuscript) discuss how evaluations of effectiveness of campaigns about HIV make it difficult to assess a program's impact. It is unclear what should be influenced: behavior, knowledge and awareness, or use of services. The authors discuss evaluations of health related campaigns other than HIV (seatbelt use, substance abuse) where the impact due to the intervention was minimal, but apparent. The authors do conclude, however, that although it is difficult to measure behavior change due to media campaigns, there are some data on effectiveness for HIV prevention, such as changes in knowledge and awareness. They also cite several studies that found media campaigns led to increased HIV testing and condom use.

Choi and Coates (1994), in their review article on media and HIV, state that although HIV campaigns have most likely had little effect on behavior in the United States, "experience in other countries such as Mexico, France and Switzerland had demonstrated the positive impact of the media campaigns on behavior change at the population level." Romer and Kim (1995) similarly posit that the use of local mass media can be particularly effective at influencing poor, urban African-American and Latina/o youths' involvement in risk behaviors.

Evaluators of the 1990-91 anti-smoking media campaign in California found that among the sample of smokers who quit during the campaign, 6.7% reported in uncued questions that advertisements had influenced their decision to quit. More than one-third of the sample, when asked directly about the campaign, indicated that the media had a role in their quitting. Investigators claimed that "while causal attributions from such investigations should be made with caution, the evidence suggests that the 1990-91 campaign did influence substantial numbers of smokers in California to quit" (Popham et al., 1993).

Suggested Uses

Advantages/Strengths

- The use of media as an intervention is generally appropriate for all audiences, and can be adjusted to its target audience.

- Because media does not necessarily require interest or action on the part of the audience, it is suitable for reaching groups with little to no previous awareness or concern about HIV.

Considerations

- A media campaign has to consider the stages of change appropriate to its target audiences, and meet the readiness of the audience to receive prevention messages.
- Media mostly provides a backdrop or stage for prevention activities, and is not as useful if it is the only source of prevention information available to someone. Personal interactions should take place in addition to media messages, in order for media to have an impact.

Targetable Media—Suggested Uses

Media can be divided into targetable and mass media forms. The difference has to do with the intended audience—is it a specific target group or is it the general public (or a set of people who do not identify or socialize with a group of others like them).

Advantages/Strengths

- Targeted campaigns are appropriate for groups which are less likely to seek out or have easy access to HIV-related information (e.g., people who are homeless, IDUs, or lower literacy).
- The use of media offers prevention without any economic investment on the part of the audience, and so can reach people who are unable to afford a TV or radio, for example.
- Targeted media can reach people with clearly identifiable “turf” or regular venues for hanging out.
- A targeted media campaign can increase the realistic perception of personal or communal risk among people who, due to denial or some demographic factor, have not seen themselves as being at risk.

Considerations

- The campaign has to be informed by a thorough needs assessment of the target audience, in order to pitch its message at the appropriate stage of change.

Mass Media—Suggested Uses

Advantages/Strengths

- Mass media can motivate people on a group/community level.
- Media campaigns can be helpful to people who have a low perception of personal or communal risk.

Considerations

- A mass media approach may not be as effective for groups facing multiple issues and barriers to behavior change.

Venue-Based Group Outreach

This category includes public events interventions.

Definition and Description

Community-level venue-based outreach involves a group of individuals who present HIV prevention activities in community settings (e.g., street corners or public forums), commercial settings (e.g., bars, sex clubs, concert halls, and theaters), or public events (e.g., street fairs and parades). The outreach activities may occur in existing settings or settings specially created for the purpose of HIV prevention. Venue-based group outreach can take a variety of forms—including community theater, dramatizations of real-life scenarios, “bar zaps,” and interactive performance art—designed to promote HIV risk reductive behaviors among audience members. The distribution of appropriate prevention materials may also be a component of these activities.

Standards of Service Provision

Requirements

- Outreach activities are designed and performed primarily by individuals who are members of the target audience.
- Events planning groups represent the diversity of the community(ies) targeted for education and prevention.
- Outreach activities respect the operating conditions at, and contribute to the spirit of, the venue/event.
- Outreach activities are interactive and engaging.
- Outreach activities provide referral information for follow-up prevention activities.

Recommendations

- Events emphasize community unity, creating a positive environment in which participants can socialize and mingle.
- Events encourage networking among members of different communities, through sharing of information and resources.

Expected Impacts

- Increased HIV knowledge and debunking of misinformation;
- Contribution to the development of a social norm favoring risk reductive behaviors;

- Audience member engagement and/or satisfaction;
- Personalization of HIV issues and the epidemic—an increased perception of HIV as personally relevant; and
- Increased motivation to participate in HIV prevention activities.

Effectiveness

Outcome Effectiveness

No formal outcome evaluations of group outreach were found. One paper, however, did report on a “cultural analysis of a community intervention” conducted among lesbian and bisexual women in bars and clubs in San Francisco. Group presentations were provided to over 1,300 women at various locations. Through informal discussions with group participants, peer educators gathered data that found the intervention “effective in prompting interest in HIV prevention information and intent to change behavior” (Stevens, 1994).

Group outreach was also studied for its effectiveness as an approach. In an evaluation of a multi-component HIV prevention program for young gay men, venue-based group outreach was found to be the most effective approach for reaching high risk young men (i.e., men who had engaged in unprotected anal intercourse in the past year). Sixty-one percent of the high risk men in the sample were reached by venue based outreach. In contrast, small group workshops were much less effective; only 19% of the high risk men were reached in this way (Kegeles, Hays and Coates, 1996).

Suggested Uses

Advantages/Strengths

- Group outreach can reach people who identify with some community and/or a group scene/social group.
- In the form of street theater, this intervention can also reach people who may be in the venue less purposefully, or for reasons having less to do with social/communal identity.
- Group outreach can be structured to address a group with multiple issues and barriers to change.
- The intervention can provide a forum for dialogue between friends and family (community-building).
- The outreach component can work for groups with a lack of access to services.
- This approach can be helpful to people with a low perception of personal or communal risk.
- Group outreach can be helpful to people needing basic information and referrals.
- The group intervention can serve as a launching pad for other prevention activities (for groups taking a first step toward risk reduction).
- Venue-based outreach at a can be useful for groups which have never experienced another intervention.
- The intervention can address people at various stages of change.

Considerations

- Service providers have to work harder, if attempting to reach people who are closeted, not identified with a group/community, or not already in an institutional setting (since they are unlikely to come to a prevention-related performance).
- The intervention staff have to create and maintain a safe environment for the targeted audience.

CHAPTER 5 - PRIORITY-SETTING FOR BEHAVIORAL RISK GROUPS

I. INTRODUCTION

In Year One (1994) of prevention planning, the HPPC formed several principles for priority-setting. In Year Two (1995) of HIV prevention planning, the HPPC's Priority-Setting Committee carried forward these principles as they developed a four-phase process for priority-setting. These principles, described in the 1995 HIV Prevention Plan, are summarized below:

- There is only one factor for determining which populations need focused prevention efforts: namely, a significant risk of contracting HIV. Risk of contracting HIV is caused by practicing certain identifiable behaviors.
- Since San Francisco has a very high prevalence of AIDS cases (287.5 per 100,000—the highest of any metropolitan area in the nation), all people in San Francisco who practice behaviors that could lead to the transmission of HIV are at high risk for contracting HIV.
- The efficiency of HIV transmission must be considered for each type of transmission act such as injection drug use, anal receptive intercourse, anal insertive intercourse, vaginal receptive intercourse, fellatio, vaginal to vaginal contact, and cunnilingus.
- Beyond the actual behaviors, co-factors which increase the risk of contracting HIV with a given behavior will be considered. These co-factors are to be used along with the primary factors listed above in determining priority of risk groups.
- The risk of infection will be characterized by the use of behavioral groups rather than the traditional 'risk' groups that have been used in the past. The 1994 HPPC established the following behavioral groups (not in rank order):

Behavioral Risk Groups**Abbreviation**

Females who have Sex with Females	FSF
Females who have Sex with Females and Inject Drugs	FSF-IDU
Females who have Sex with Females and Males	FSF/M
Females who have Sex with Females and Males and Inject Drugs	FSF/M-IDU
Females who have Sex with Males	FSM
Females who have Sex with Males and Inject Drugs	FSM-IDU
Males who have Sex with Females	MSF
Males who have Sex with Females and Inject Drugs	MSF-IDU
Males who have Sex with Males and Females	MSM/F
Males who have Sex with Males and Females and Inject Drugs	MSM/F-IDU
Males who have Sex with Males	MSM
Males who have Sex with Males and Inject Drugs	MSM-IDU

Members of the Priority-Setting Committee based their decision-making upon this guidance from the 1994 (Year One) principles. Essentially, members were interested in a priority-setting model that had a basis in science and made good use of existing data. The crucial elements of the model needed to be frequency of risk behaviors, prevalence of HIV, and presence of co-factors that could increase risk for HIV.

II. COMMITTEE OPERATIONS

The Priority-Setting Committee met approximately weekly for five months to develop the model for priority-setting. The model was developed through discussion among Committee members. Often, group discussion resulted in consensus to proceed in a specific direction. When consensus was not obvious, issues were decided by majority vote. In most cases, when a vote was taken, the result strongly indicated a specific direction; that is, all but one or two were in agreement. Members were sensitive to each other's opinions, and when an issue arose in which one or two members disagreed with the majority, attention was paid to the minority opinion.

Community input was obtained in a variety of ways. Public comment occurred at the Council meetings, and this public comment was considered in the Committee discussions. Providers on the Council brought their experience and their connections to other providers and consumers; these experiences naturally were drawn into the discussions. At one point, members of the transgender community provided extensive comment to the Committee for two weeks, to enable the Committee to fit transgender groups into its model. Initially, these discussions were difficult because the Committee had not established a mechanism to receive public comment outside of the full Council meetings, and the representatives of the transgender community held strong opinions. However, the discussions continued and a satisfactory resolution was reached. This experience enabled the Committee to clarify the methods for public comment at the committee level.

III. RECOMMENDATIONS FOR PRIORITY-SETTING

The Priority-Setting Committee established a four phase process for prioritizing groups at risk. A summary of the four phases is presented below, followed by detailed information about each phase. In reading this information, it is important to bear in mind the Council's definition of "behavioral group" and "target group": behavioral groups are defined according to behavior, rather than identity. Examples of behavioral groups are men who have sex with men, women who have sex with men, and men who have sex with women and inject drugs. Target groups are defined by identity, not necessarily sexual behavior. A target group is defined by the prevention provider who intends to serve it; therefore, the group may be narrowly defined (such as African-American commercial sex workers) or broadly defined (such as injection drug users).

- **Phase I** prioritizes behavioral groups using a matrix that contains the estimated average annual frequency of risk activities and an estimated relative risk value for each activity.
- **Phase II** adjusts the Phase I score by including HIV prevalence and population size for each behavioral group. Phases I and II form the basic ranking of behavioral groups.
- **Phase III** identifies categories of co-factors, provides key examples for each, and describes them and their role in HIV transmission.
- **Phase IV** allows providers submitting applications for funding to apply the information in the Plan to their specific target groups, and requires providers to conduct a needs assessment of the primary risk factors and the co-factors in their target groups.

The development of the four-phase model for priority-setting mediated tensions among Committee members based on different conceptual approaches to prioritization. On the one hand, many saw utility in a numerically-based formula. On the other hand, many wanted to include in the process the complexities inherent in prevention that could not be supported in a formula-based approach. This tension was ameliorated by adopting a model that incorporated both approaches. Part of the model (Phases I and II) categorizes and ranks behavioral groups through the use of a formula (described later in this chapter). Another part of the model (Phase III) takes into account the complexities of the epidemic through the inclusion of a host of factors that increase susceptibility to HIV or present challenges to prevention efforts.

A second area of tension was between behavior and identity—between the general ranking of behavioral groups and the specific assessment of target groups' risk. The model for priority-setting bridges this tension by incorporating mechanisms for the general ranking of behavioral groups (Phases I and II) and the identification of increased risk among specific target groups (Phase IV). The ranking of behavioral groups (Phases I and II) was based on behavior, rather than identity (e.g., self-identified lesbians who have sex with men are ranked on the basis of behavior with both women and men). However, providers are encouraged (in Phase IV) to identify sub-populations most at risk within these behavioral groups by examining the frequency of risk behaviors and presence of co-factors.

Each of the phases is described in more detail below.

Phase I - Behaviors and Relative Risk

Developing and testing the matrix

Using guidance from the 1994 planning process (i.e., risk behaviors and behavioral risk populations), the Committee developed the Phase I matrix. The three components of this matrix are twelve behavioral groups, 15 behaviors that corresponded to the routes of HIV transmission, and the relative risk of each behavior.

Committee members tested the matrix as a model for prioritizing behavioral groups using “best-guess” estimates. For each cell, members agreed upon and wrote an estimate of the average number of times that behavioral group engaged in that act annually. Each cell was multiplied by an estimated relative risk score (indicating the greater or lesser risk of one act when compared to another) for each act, and a total for each row was calculated. There was a range of total scores from 2,000 to over 12,000, indicating that the model differentiated between groups (if the scores had been close this would indicate that the model was not sufficiently sensitive to the differences in behaviors among the groups and would have not been useful). Having passed this test, the model was adopted and information was collected about the average annual frequency of acts for each behavioral group and an estimated relative risk score for each act.

Gathering information about frequency of behaviors

Data for the average annual frequencies of each act were gathered from HIV and sexuality literature using 30 sources. Credible sources of information were found for the highest risk acts. It was difficult to find information about sharing unclean sex toys and other blood to blood transmission (including manual-anal sex, tattooing, piercing, and acupuncture with unsterile needles). Fortunately, these acts have a low relative risk score, so even great variations in the frequency have little effect in the final Phase I score. A summary of this information and the methods for estimating average annual frequency is provided in Attachment 1 at the end of this chapter.

Estimating relative risk

Not all acts are equally effective in transmitting HIV. Therefore, an estimation of the effectiveness of each act was needed in the model. The Committee debated whether to use infectivity rate or relative risk. Infectivity rate is often defined as the percent chance of becoming infected per episode or per partnership. Relative risk indicates how risky one act is compared to another. Information about relative risk and infectivity rates was collected through a survey of the literature and interviews with over a dozen researchers.

Estimates of both relative risk and infectivity rates are based on uncertain information. A great deal of individual difference in infectivity seems to exist. Also, the probability varies depending on how infectious the partner is. It appears that people in the early stage of HIV (from infection to some time after antibodies develop) are highly viremic; those in the stage from a few months after infection to just before they become symptomatic are less viremic; viremia increases again in the symptomatic state (but probably does not reach the levels of viremia of the early stage); viremia then decreases sometime after an AIDS-defining condition is diagnosed. The fluctuating viremia makes it difficult to establish a per episode infectivity rate. The issue of viremia fluctuations can be ignored in the HPPC Priority-Setting Phase I model, since the model applies to groups of people, not individuals—within each of the behavioral groups, there are people at all stages of viremia.

A second problem in estimating relative risk or infectivity rates is that less is known about the lower-risk acts. Infectivity and relative risk have been studied for needle-sharing, anal receptive sex, and vaginal receptive sex—the acts with the highest risk. It is more difficult to determine the risk of fellatio, since most people in the studies engaged in both intercourse and fellatio. But there is a general agreement among researchers that several of the acts are of low risk (e.g., cunnilingus, vaginal to vaginal contact).

A third issue is that some researchers cite infectivity rates as estimates of the percent chance of becoming infected per partnership, and others cite rates per exposure (act). Estimates per partnership may be more reliable. These estimates come from several good studies of discordant couples; these studies do not examine what acts the couples perform, but track when/if the negative partner seroconverts. The benefit of this approach is that the information may be more reliable; the drawback is that this information is not available for all the behavior groups—most of the discordant couples studies are among heterosexual couples. Additionally, for many who are targeted with prevention interventions, per relationship infectivity is a poor measure, since ‘partnerships’ may be overlapping or of very short duration.

After considering information about relative risk and infectivity rates, the Committee selected relative risk per act, since this information was more easily estimated. Relative risk is the riskiness of one act compared to another. Beginning with one act as a baseline, for example receptive vaginal intercourse, relative risk estimates how much more or less risky is another act, such as receptive anal intercourse or cunnilingus. The consultants surveyed the literature and spoke to researchers to obtain estimates of relative risk. These estimates are contained in Attachment 2 at the end of this chapter. The Committee discussed the findings and chose relative risk rates as follows:

Act	Relative Risk
Sharing unsterile needles	12
Anal receptive intercourse	9
Vaginal receptive intercourse	3
Vaginal insertive intercourse during menses	2
Anal insertive intercourse	2
Vaginal insertive intercourse	1.5
Giving fellatio	1
Giving cunnilingus during menses	1
Act	Relative Risk
Giving cunnilingus	0.5
Other blood to blood transmission	0.5
Getting cunnilingus	0.1
Getting fellatio	0.1
Sharing unclean sex toys	0.1
Vaginal to vaginal contact during menses	0.002
Vaginal to vaginal contact	0.001

The number “3” for vaginal receptive intercourse was chosen arbitrarily as the baseline from which the other behaviors were compared and assigned a risk rate relative to that number. For example, much of the literature on risk estimates indicate that sharing unsterile needles is four times riskier than vaginal receptive intercourse, so its relative risk score is 12.

These components—average annual frequency of risk act for each behavioral group and the relative risk of each act—form the Phase I matrix. The matrix is shown at the end of this chapter. The top row of the matrix shows the relative risk of each act. Below this are cells (boxes) for each act and behavioral group. Some cells are blank because this is not an act practiced by that behavioral group—with the exception of certain acts for transgender persons; these exceptions are detailed in Attachment 3. The cells that are not blank contain two numbers. The top number represents the estimated average annual frequency of the *unprotected* act among those in the behavioral group. The bottom number represents the product of the average annual frequency multiplied by the relative risk. To the right of the acts is a column of the total Phase I scores, calculated by adding the relative risk/frequency estimates (the bottom number in each cell).

Phase II - Prevalence and Population Size

Phase II modifies the Phase I score to incorporate HIV prevalence and population size. Estimates of prevalence and population size were developed in the 1994 prevention planning process. The Phase II score does not use the actual population size, but rather a number between 1 and 4. Population size is grouped into four categories:

- 1) 0 - 1,000
- 2) 1,001 - 10,000
- 3) 10,001 - 100,000
- 4) 100,001 and over

The total score is the product of the Phase I score, the estimated prevalence, and the population size score.

The final presentation of the behavioral groups in rank order by the Phase I and II scores takes into account transgender males and females, both pre-operative and post-operative. There is some variation in annual frequency and relative risk between transgender and genetic females and males, but it is not sufficient to change the rank order. These variations are described in Attachment 3. Transgender females and males who share unsterile needles to inject hormones are included in the IDU behavior groups, as are any persons who share unsterile needles to inject other substances. Transgender females and males who do not share unsterile needles are included in the non-IDU behavior groups.

Behavioral Risk Populations in Prioritized Order:

1. Males, transgender male-to-female (pre-operative), and transgender female-to-male (post-operative) who have sex with males and inject drugs.
2. Males, transgender male-to-female (pre-operative), and transgender female-to-male (post-operative) who have sex with males and females and inject drugs.
3. Males, transgender male-to-female (pre-operative), and transgender female-to-male (post-operative) who have sex with males.
4. Males, transgender male-to-female (pre-operative), and transgender female-to-male (post-operative) who have sex with males and females.
5. Females, transgender female-to-male (pre-operative), and transgender male-to-female (post-operative) who have sex with males and inject drugs.
6. Males, transgender male-to-female (pre-operative), and transgender female-to-male (post-operative) who have sex with females and inject drugs.
7. Females, transgender female-to-male (pre-operative), and transgender male-to-female (post-operative) who have sex with males and females and inject drugs.
8. Females, transgender female-to-male (pre-operative), and transgender male-to-female (post-operative) who have sex with females and inject drugs.
9. Females, transgender female-to-male (pre-operative), and transgender male-to-female (post-operative) who have sex with males and females.
10. Females, transgender female -to-male (pre-operative), and transgender male-to-female (post-operative) who have sex with males.
11. Males, transgender male-to-female (pre-operative), and transgender female-to-male (post-operative) who have sex with females.
12. Females, transgender female-to-male (pre-operative), and transgender male-to-female (post-operative) who have sex with females.

Using the abbreviations, the priority behavior groups are as follows (FTM= transgender female-to-male; MTF=transgender male-to-female; S=sex; M=male; F= female):

1. M; MTF (pre-op); FTM (post-op) - SM-IDU
2. M; MTF (pre-op); FTM (post-op) - SM/F-IDU
3. M; MTF (pre-op); FTM (post-op) - SM
4. M; MTF (pre-op); FTM (post-op) - SM/F
5. F; FTM (pre-op); MTF (post-op) - SM-IDU
6. M; MTF (pre-op); FTM (post-op) - SF-IDU
7. F; FTM (pre-op); MTF (post-op) - SF/M-IDU
8. F; FTM (pre-op); MTF (post-op) - SF-IDU
9. F; FTM (pre-op); MTF (post-op) - SF/M
10. F; FTM (pre-op); MTF (post-op) - SM
11. M; MTF (pre-op); FTM (post-op) - SF
12. F; FTM (pre-op); MTF (post-op) - SF

Phase III - Co-factors

Phase III entails the delineation of co-factors—factors that can increase risk for HIV, increase susceptibility to infection, or decrease ability to receive and act upon HIV prevention messages. These factors—biological, economic, psychological, abuse-related, behavioral, access-related, and social/situational—are vital considerations for HIV prevention. Unsafe behavior causes the epidemic, and thus establishes in this plan both the categorization of groups on the basis of their behavior and the focus on frequency of unsafe behavior. However, behavior is inextricably a sociocultural phenomenon. Therefore, adequate prevention planning must take into account not only the unsafe behaviors of target populations, but the social and cultural factors that motivate these behaviors.

While Phases I and II use simple quantitative modeling, Phase III describes conditions that may increase HIV risk. While Phases I and II focus on the actual risk behaviors, Phase III focuses on the conditions that increase the likelihood of engaging in these behaviors. While Phases I and II focus on behavioral groups, Phase III focuses on characteristics of target populations. Phase III stands alongside Phases I and II in the Plan to bring into consideration the complex conditions in the lives of people that may increase their risk for HIV.

The priority-setting co-factors with key examples are listed below. It must be stressed that the items listed under each heading are intended as key examples rather than an exhaustive list. Providers, in conducting needs assessments among their target populations, will examine and describe the presence and impact of these and other co-factor issues.

Exhibit 5.1
Priority-Setting Co-Factors with Key Examples *

Biological

- STDs

Psychological

- social support
- self-esteem
- mental health stressors

Abuse-Related

- history of child sexual abuse
- history of abusive relationships
- rape

Access-Related

- knowledge of services
- language
- low literacy

Economic

- financial instability
- homelessness

Behavioral

- substance use/abuse
- commercial sex work
- risky partner
- multiple sex partners

Social/Situational

- institutionalization
- perception of susceptibility
- discrimination

* This is not meant to be an exhaustive list of examples

Phase IV—Provider-Specific Information

Phases I and II provide a basic ranking of the behavioral groups, and Phase III describes differences within the behavioral groups and the resulting differences in risk behavior. Phase IV enables providers to apply the model to their specific target groups. Many providers identify their target groups, not necessarily by the behavior, but by other characteristics such as sexual orientation, ethnicity, or life situation. Within the general behavioral groups there are specific target groups at increased risk. For example, young gay men are at higher risk than the general category of men who have sex with men. Similarly, commercial sex workers are at higher risk than the general category of women who have sex with men. Phase IV allows these distinctions to come across and enables the populations with the highest need for prevention to take precedence over populations at lower risk.

Phase IV occurs during the application process. Providers will be given specific guidance within the request for proposals in order to prepare applications. The intent of the HPPC is that providers will be expected to conduct a needs assessment that involves the collection of information about the average frequency of risk behaviors and an assessment of the effects of cofactors among their target group. The first year of implementing this HIV

Prevention Plan will operate as a transitional year, and providers will be offered technical assistance to increase their skills in needs assessment and evaluation. The Resource Allocation Committee will develop recommendations about the requirements of using Phase IV information during this transition year. Over time, providers will be in a better position to assess and describe more accurately the needs of their target groups—in terms of both the behaviors that place the clients at risk and the co-factors that increase their susceptibility to HIV or operate as barriers to prevention.

The Priority-Setting Matrix is shown on the next page, followed by a very brief summary of key co-factors. An extensive description of co-factors can be found in Chapter 3, Section IX. After the summary of co-factors are attachments to the chapter. Attachment 1 contains technical information about how the estimates in the matrix were derived. The calculations used to derive the estimates can be helpful to prevention providers in their preparation of applications for AIDS Office funding, because it describes one method of translating information found in behavioral risk assessments and articles into estimates for the Priority-Setting Matrix. Also included in Attachment 1 is a series of tables outlining the data that were used to calculate the cells in the matrix. Attachment 2 contains background information about how the estimates of relative risk used in the matrix were developed. Attachment 3 contains background information about estimates of frequency and relative risk behaviors among transgender persons.

Exhibit 5.2

San Francisco HIV Prevention Planning Council Priority-Setting Matrix

Phase I																	Phase II				
Relative Risk:	12	9	3	2	2	1.5	1	1	0.5	0.5	0.1	0.1	0.1	0.002	0.001						
	Sharing Unsterile Needles	Anal Receptive Intercs.	Vaginal Receptive Intercs.	Anal Insertive Intercs.	Vaginal Insertive Menses	Vaginal Insertive Intercs.	Giving Fellatio	Giving Cunnlgs. Menses	Giving Cunnlgs	Other Blood to Blood	Getting Fellatio	Getting Cunnlgs.	Sharing Unclean Sex Toys	Vag. to Vaginal Menses	Vaginal to Vaginal	Total Phase I	Prev	Pop. Size	Pop. Score	Phase II Total	Rank
MSM-IDU	70 840	24 216		18 36			30 30			24 12	30 3		35 3.5			1141	64.71%	2,250	2	1,476.04	1
MSM/F-IDU	75 900	7 63		18 36	3 6	21 31.5	13 13	3 3	20 10	7 3.5	18 1.8		22 2.2			1070	48.53%	750	1	519.27	2
MSM		21 189		21 42			9 9			21 10.5	37 3.7		35 3.5			258	44.99%	41,250	3	347.82	3
MSM/F		21 189		21 42	3 6	21 31.5	9 9	3 3	20 10	21 10.5	37 3.7		22 2.2			307	33.45%	13,750	3	307.97	4
FSM-IDU	40 480	6 54	77 231				48 48			6 3		35 3.5	15 1.5			821	12.15%	3,300	2	199.50	5
MSF-IDU	38 456			6 12	12 24	82 123		6 6	41 20.5	2 1	42 4.2		22 2.2			649	13.96%	8,500	2	181.17	6
FSF/M-IDU	40 480	10 90	50 150				26 26	16 16	100 50	14 7		100 10	64 6.4	16 0.03	100 0.1	836	12.00%	625	1	100.26	7
FSF-IDU	40 480							14 14	94 47	12 6		94 9.4	124 12.4	14 0.03	94 0.094	569	4.35%	575	1	24.75	8
FSF/M		9 81	46 138				24 24	16 16	100 50	14 7		100 10	64 6.4	16 0.03	100 0.1	333	0.61%	15,750	3	6.09	9
FSM		6 54	62 186				33 33			6 3		37 3.7	15 1.5			281	0.19%	285,049	4	2.14	10
MSF				8 16	10 20	66 99		6 6	41 20.5	2 1	43 4.3		15 1.5			168	0.09%	252,544	4	0.61	11
FSF								14 14	94 47	12 6		94 9.4	124 12.4	14 0.03	94 0.094	89	0.08%	14,550	3	0.21	12

IV. SUMMARY OF CO-FACTORS

The following is a brief summary of the co-factors. For a detailed presentation of co-factors, please see Chapter 3, Section IX.

STDs:

The presence of a genital STD increases risk for HIV. Other STDs may increase risk, and even a history of an STD is associated with increased risk or infection in many studies.

Poverty:

Poverty is associated with increased risk and infection, largely because of its connection with increased likelihood of substance use and commercial sex work. Perhaps, too, the poor nutrition concomitant with poverty may have a biological effect.

Homelessness:

Information about poverty applies to homelessness, as well. Additionally, incidents of forced sex, impaired mental health status, and debilitated health are issues of concern for members of this population.

History of Child Abuse:

A number of studies show an association between history of child abuse and HIV infection, due perhaps to a high prevalence of drug use, prostitution, multiple partners, and chronic depression.

Abusive Relationships:

Many in abusive relationships are survivors of childhood abuse, so the issues are similar, with the addition of a present threat of violence which makes condom negotiation less possible.

Rape:

Since rape occurs usually without condoms, some risk may exist; however, rape does not appear to be independently associated with HIV infection.

Social Support:

The association between social support and HIV is weak. It may be stronger among those of moderate or higher socioeconomic status, but has contradictory influences, or even negative influences, on risk for many vulnerable populations such as the poor, drug users, and homeless women.

Mental Health Stressors

Behaviors known to be associated with certain psychological disorders may increase risk of infection, including hypersexuality, poor impulse control, self-destructive behavior, impaired judgment, and substance use. Additionally, several studies have found an association between depression and involvement in high risk behaviors.

Substance Use/Abuse:

The association is not so much with general substance use or a history of substance use/abuse, but with substance use during sex. Crack and poppers have pronounced influences on risk.

Commercial Sex Work:

Commercial sex workers face considerable risk for HIV, due to high numbers of contacts, high prevalence of STDs, and high rates of substance use/abuse.

Multiple Partners/Risky Partners

People who have sex with multiple partners may be at greater risk for HIV infection than those who have sex with a single partner because the probability of contact with an infected individual increases as the number of partners increases. Persons with risky partners also may be at increased risk for HIV if protection is not consistently used. Some people may assume that they are not at risk, not knowing that their partners are engaging in high-risk activities.

Lack of Access:

Knowledge of services and prevention services in a language and manner suitable to the audience are fundamental to effective prevention, although, strictly speaking, no studies were found to show a statistical association.

Incarceration:

High rates of HIV seropositivity among people entering the criminal justice system pose a threat of infection through unsafe sexual and injection drug use practices to others who are incarcerated.

Low Perception of Risk:

Perception of risk for HIV is a necessary precursor for risk reduction behaviors.

Discrimination:

Because of its complex nature, little is known of the statistical association of discrimination and HIV risk, but these issues are critical considerations in the provision of prevention information.

ATTACHMENTS

- | | |
|---------------------|---|
| Attachment 1 | A) Calculations Used to Derive Estimates in the Phase I Matrix
B) Information Gathered on Frequency of Risk Behaviors
C) References |
| Attachment 2 | Estimates of Relative Risk and Infectivity Rates |
| Attachment 3 | Estimates of the Frequency and Relative Risk of Behaviors Among Transgender Persons |

ATTACHMENT 1.A CALCULATIONS USED TO DERIVE ESTIMATES IN THE PHASE I MATRIX

The matrix contains estimates of the average annual frequency of risk behaviors for each behavior group. These estimates came from a variety of sources. The sources are listed in a bibliography at the end of this attachment. In most cases, research reports did not present risk behavior in terms of the number of times per year that individuals engaged in these behaviors. Some studies only reported the percentage of the population that engaged in certain behaviors. Other studies reported information (particularly for condoms use or needle sharing) in terms of “always, sometimes or never” engaging in self-protective behavior. Some studies reported the frequency of behavior as “never, less than once per month, several times per month or 1-2 times weekly.” For some behaviors, a combination of several research studies informed the estimated frequency. Finally, in some cases, no information was found, requiring rough estimates to be made.

Depending on how the research findings were presented, one or more calculations are used to translate the findings into the format of the matrix. The calculations used to translate various types of research findings are presented below. However, it is important to note that all frequencies presented in the Priority-Setting Matrix are, in fact, estimates. It is also important to note that the matrix is not sensitive to differences in the average annual frequencies for behaviors with low relative risk scores. For behaviors where the relative risk is 1.5 or less, variations in the frequency of behavior have only a small impact on the group’s final score. For example, increasing or decreasing the average number of times per year that members of a group perform cunnilingus, with a relative risk of 0.5, does little to change that group’s overall score or priority ranking.

Never-Sometimes-Always

For those studies that presented information about a specific sexual behavior in a “never-sometimes-always” format, a consistent method for calculating frequency was used. The calculations rely on first obtaining an estimate for an average frequency of unspecified “sex” for the group. This number is used in combination with reports of the frequency of engaging in specific behaviors. The following example illustrates converting information in the Never-Sometimes-Always format to an Average Annual Frequency.

Example: A credible information source states that the target population engages in some type of sex 78 times per year. Further, it states that the percentage of persons who engage in a specific act is 25% always, 50% sometimes, and 25% never. To obtain the estimate for the specific act, imagine that there are 100 people, and 25% of the people “never” engage in the behavior, 50% “sometimes” do, and 25% “always” do. If the average frequency of “sex” is 78 times per year, the following calculation can be used to estimate the average annual frequency of that specific behavior:

Engage in the specific act:

never	25 people engage in the behavior 0 times	$(25 \times 0 = 0)$
always	25 people engage in the behavior 78 times	$(25 \times 78 = 1950)$
sometimes	50 people engage in the behavior 39 times*	$(50 \times 39 = 1950)$

* Since “sometimes” could mean any amount between almost always and almost never, an average frequency of half or 50% of the frequency of sex is used (50% of 78 is 39).

These products are then added together, and the total divided by 100 to get the *average annual frequency* for the entire population. $(0 + 1950 + 1950 = 3900; 3900/100 = 39)$ This represents the estimated frequency of that act.

Adjustments for Unprotected Acts

To obtain the estimate of frequency that persons engage in this act without protection, the average frequency of condom or other barrier use is multiplied by the average number of times the group engaged in the act. For example, if reliable information is found that the group uses condoms or other barriers: 10% never (always has unprotected sex), 60% sometimes (sometimes has unprotected sex), and 30% always (never has unprotected sex), the calculation would be as follows:

Has unprotected sex:

Always	10% has unprotected sex 39 times	$(10 \times 39 = 390)$
Never	30% has unprotected sex 0 times	$(30 \times 0 = 0)$
Sometimes	60% has unprotected sex 20 times	$(60 \times 20 = 1200)$

Adding the products together and dividing by 100 the estimate of frequency of this specific act *unprotected*: $(390 + 0 + 1200) = 1590; 1590 / 100 = 16$ times.

Never—Once—Less than Once per Month—Several Times per Month

All frequencies for FSF, FSF/M, FSF-IDU and FSF/M-IDU are based on data that were presented as a certain percentage of women engaging in the behavior once during the past year, more than once per month, several times per month, etc. The actual numbers used for calculation of number of times per year are as follows:

Never	0
Once	1
Less than once per month	12
Several times per month	33
1-2 times per week	78
More than several times per week	208

To obtain the average annual frequency for the population, the same type of calculation as described above is used. For example, if 5% never performed fellatio, 10% performed fellatio once, 20% less than once per month, 20% several times per month, 25% 1-2 times per week, and 20% more than several times per week, these percentages would be multiplied by the actual number assigned to that category. The products would then be added together and the sum divided by 100 for the average frequency overall. The calculations are illustrated below:

$$\begin{array}{rcl}
 5*0 & = & 0 \\
 10*1 & = & 10 \\
 20*12 & = & 240 \\
 20*33 & = & 660 \\
 25*78 & = & 1950 \\
 20*208 & = & 4160 \\
 \hline
 & & 7020/100 = 70.2
 \end{array}$$

This estimate of the average annual frequency of fellatio would need to be adjusted to take into account the percentage of time that the act occurred without a protective barrier, using the same method as described in the section above, Adjustments for Unprotected Acts.

SPECIFIC INFORMATION USED FOR THE MATRIX

The top number in each cell of the matrix is the estimated annual frequency. The bottom number is the frequency multiplied by the relative risk (printed on the top line of the matrix). The next section provides the specific information used to calculate each cell in the matrix.

Males Who Have Sex With Males And Inject Drugs (MSM-IDU)

Sharing Unclean Needles: 70

Osella et al. (1993) found that “gay IDUs are 2.7 times more likely to share needles than heterosexual IDUs,” while others (Lemp et al., 1994; Wolitzki et al., 1992) did not show such a discrepancy. Taking this into account and based on the unclean needle sharing frequency for MSF-IDU of 38, the average annual frequency for MSM-IDU is estimated at 70 for the matrix.

Receptive Anal Intercourse: 24

Calculations for sexual behaviors are based on Barrett et al.’s (in press) study which reported the median frequency of “sex” for MSM to be 45 times per year. Receptive anal intercourse behavior data for MSM-IDU included: 31% of MSM-IDU did not have receptive anal intercourse during the prior six months; 32% of those having any anal intercourse never used condoms (22% of all subjects) (Lewis and Watters, 1994). It is assumed that the remaining 47% had some unprotected anal intercourse. The resulting calculation is: $((31*0) + (22*45) + (47*24))/100 = 21$. Findings from a study by Wolitzki et al. (1992) found that 46% of their sample reported no condom use. The frequency was therefore increased to 24 to account for this finding on condom use.

Insertive Anal Intercourse: 18

Calculations for sexual behaviors are based on Barrett et al.'s (in press) study which reported the median frequency of "sex" for MSM to be 45 times per year. Insertive anal intercourse behavior data for MSM-IDU included: 46% of MSM-IDU did not have receptive anal intercourse during the prior six months; 32% of those having any anal intercourse never used condoms (17% of all subjects) (Lewis and Watters, 1994). It is assumed that the remaining 37% had some unprotected anal intercourse. The resulting calculation is: $((46*0) + (17*45) + (37*24))/100 = 17$. Findings from a study by Wolitzki et al. (1992) found that 46% of their sample reported no condom use. The frequency was therefore increased to 18 to account for this finding on condom use.

Giving and Receiving Fellatio: 30

Calculations for sexual behaviors are based on Barrett et al.'s (in press) study which reported the median frequency of "sex" for MSM to be 45 times per year. Behavior data on oral sex for MSM-IDU included: 13% never engaged in fellatio (either giving or receiving), and 44% of those who did, never used condoms (Lewis and Watters, 1994). Therefore 38% of the total engaged in unprotected fellatio and 40% may have engaged in unprotected fellatio. The resulting calculation is: $((13*0) + (38*45) + (49*24))/100 = 30$.

Other Blood to Blood: 24

In the absence of any research data, the same frequency as Receptive Anal Intercourse is used as a rough estimate. Given the low relative risk score of this act, precise estimates are not necessary.

Sharing Unclean Sex Toys: 35

In the absence of any research data, this frequency is a rough estimate. Based on Barrett et al.'s study (in press) of annual frequency of sex of 45 times per year, this estimate assumes that three-quarters of the encounters include sex toys or digital sex.

Males Who Have Sex With Males And Females And Inject Drugs (MSM/F-IDU)

Sharing Needles: 75

MSM/F-IDU were found to be slightly more likely to share unclean needles than MSM-IDU (Lewis and Watters, 1994). Therefore, average annual frequency was estimated at 75, slightly higher than the 70 for MSM-IDU.

Receptive Anal Intercourse: 7

Calculations for sexual behaviors are based on Barrett et al.'s (in press) study which reported the median frequency of "sex" for MSM to be 45 times per year. Receptive anal intercourse behavior data for MSM/F-IDU included: 80% did not have receptive anal intercourse during the prior six months; 52% of those having any anal intercourse never used condoms (10% of all subjects) (Lewis and Watters, 1994). It is assumed that the remaining 10% had some unprotected anal intercourse. The resulting calculation is: $(80*0 + 10*45 + 10*24)/100 = 7$.

Insertive Anal Intercourse: 18

Calculations for sexual behaviors are based on Barrett et al.'s (in press) study which reported the median frequency of "sex" for MSM to be 45 times per year. Considering that in one study, 33% had insertive anal intercourse with men and 16% had it with women (Lewis and Watters, 1994), a maximum of 51% had not had insertive anal intercourse with either gender. Of those that did engage in insertive anal intercourse, 52% never used condoms, which is 27% of all subjects. It is assumed that the remaining 22% had some unprotected anal intercourse. The resulting calculation is: $((51*0) + (27*45) + (22*24))/100 = 18$.

Insertive Vaginal Intercourse: 21

Calculations are based on the median frequency of "sex" per year of 45 (Barrett et al., in press). Lewis and Watters (1994) found that 36% of their sample did not engage in vaginal intercourse during the prior six months, and 41% of those who did, did not use condoms (26% of the total). It is assumed that the remaining 38% had some unprotected vaginal intercourse. The resulting calculation is: $((36*0) + (26*45) + (38*24))/100 = 21$.

Give Fellatio: 13

Calculations are based on the median frequency of "sex" per year of 45. Sixty-four percent (64%) did not receive fellatio during prior six months, and 47% of those who did, did not use condoms (17% of the total). It is assumed that 19% had some unprotected fellatio. The resulting equation is: $((64*0) + (17*45) + (19*24))/100 = 13$.

Give Cunnilingus during Menses: 3

In the absence of data on this behavior for MSM/F-IDU, a formula based on data for FSF is used (SF Department of Public Health, 1993). For FSF, the frequency of cunnilingus during menses is approximately 15% of the frequency of cunnilingus without menses. Using this 15%, for MSM/F-IDU we arrive at 15% of 20 = 3.

Give Cunnilingus: 20

Calculations are based on the median frequency of "sex" per year of 45 (Barrett et al., in press). Lewis and Watters (1994) found that 42% of their sample of MSM/F-IDU had engaged in cunnilingus during the prior six months. Assuming all those who engaged never used a barrier, the resulting calculation is: $((58*0) + (42*45))/100 = \text{approximately } 20$.

Other Blood to Blood: 7

In the absence of any research data, the same frequency as Receptive Anal Intercourse is used as a rough estimate. Given the low relative risk score of this act, precise estimates are not necessary.

Receive Fellatio: 18

Calculations are based on the median frequency of “sex” per year of 45 (Barrett et al., in press). Considering that 53% of subjects in Lewis and Watters’ (1994) study received fellatio from men during the prior six months and 47% received fellatio from women, it was estimated of 47% of the total never received fellatio, and 47% of those who did, did not use condoms (25% of all subjects). The resulting calculation is: $((47*0) + (25*45) + (28*24))/100 = 18$.

Sharing Unclean Sex Toys: 22

In the absence of any research data, this frequency is a rough estimate. Based on Barret et al.’s study (in press) of annual frequency of sex of 45 times per year, this estimate assumes that approximately half of the encounters include sex toys or digital sex.

Males Who Have Sex With Males (MSM)**Receptive Anal: 21**

Calculation is based on the median frequency of “sex” per year of 45, and the finding that 45.7% of individuals engage in unprotected anal intercourse (Barrett et al., in press). Thus we have: $(45.7\% * 45)/100 = 21$. This number is a realistic estimate based on other studies (Osmond et al., 1994; Hays et al., 1990; Bastani and Marcus, 1991; Paul et al., 1993), where similar calculations resulted in average annual frequencies ranging from 12 to 30.

Insertive Anal: 21

The same frequency for receptive anal intercourse, 21, is used for insertive anal intercourse, since many studies did not differentiate between the two, and for those that did, the differences were small.

Giving fellatio: 9

Average annual frequency of 9 is based on Hays et al.’s (1990) finding that 19% of individuals performed fellatio with ejaculation. This was multiplied by 45, the median frequency of “sex” per year (Barrett et al., in press). $(19\% * 45)/100 = 9$.

Other Blood to Blood: 21

In the absence of any research data, the same frequency as Receptive Anal Intercourse is used as a rough estimate. Given the low relative risk score of this act, precise estimates are not necessary.

Receiving fellatio: 37

Average annual frequency of 37 is based on one finding that 83% of MSM report receiving fellatio without ejaculation (Hays et al., 1990). The median frequency of “sex,” 45, is also used (Barrett et al., in press). $(83 * 45)/100 = 37$.

Sharing Unclean Sex Toys: 35

In the absence of any research data, this frequency is a rough estimate. Based on Barret et al.'s study (in press) of annual frequency of sex of 45 times per year, this estimate assumes that three-quarters of the encounters include sex toys or digital sex.

Males Who Have Sex With Males And Females (MSM/F)

For the average annual frequencies of Receptive Anal Intercourse, Insertive Anal Intercourse, Giving Fellatio, and Receiving Fellatio the same numbers are used as those for MSM. Most of the studies examined did not distinguish between MSM and MSM/F so the same numbers are used for the matrix.

Vaginal Insertive Intercourse, Giving Cunnilingus and Giving Cunnilingus during Menses:

The only data on heterosexual activity of MSM/F are findings from studies of MSM/F IDUs (Wolitski et al., 1992; Lewis and Watters, 1994). Therefore the same frequency figures as those for the MSM/F IDU are used.

Females Who Have Sex With Males And Inject Drugs (FSM-IDU)

Sharing Unclean Needles: 40

Based on Freeman et al.'s (1994) study that reported minimum average injection frequency of heroin to be 243-438; cocaine, 107-164 and speedballs, 123-202, the overall frequency of injection is estimated to be roughly 350 times per year. The study also reported on sharing and cleaning behaviors of IDUs. Based on the percent who shared some (70%) or all (4%) of the time, the frequency of sharing is calculated as follows: $((4*350) + (26*0) + (70*175))/100 = 137$. Then multiplying by the percent of those who do not clean their needles every time (35%), the average frequency of sharing unclean needles is approximately 58 times per year.

Calculation of a second study's (Latkin et al., 1994) findings on sharing and cleaning frequency results in an estimated 32 times per year. Frequency for the matrix is then estimated at 40 based on these and other data.

Receptive Anal Intercourse: 6

This figure is taken directly from the study by Wells et al. (1993), where the frequency of anal intercourse averaged .49 times per month. Multiplying .49 by 12 results in 5.88 rounded to 6 times per year.

Receptive Vaginal Intercourse: 77

Data from Wells et al.'s (1993) was used. The average frequency of vaginal sex per year multiplied by the percent of times a condom was not used results in: $86\% \text{ of } 89 = 77$.

Giving Fellatio: 48

This figure was taken directly from the study by Wells et al. (1993), where the frequency of fellatio averaged 3.97 times per month. Multiplying 3.97 by 12 results in 47.64 rounded to 48 times per year.

Other Blood to Blood: 6

In the absence of any research data, the same frequency as Receptive Anal Intercourse is used as a rough estimate. Given the low relative risk score of this act, precise estimates are not necessary.

Receiving Cunnilingus: 35

This figure was taken directly from the study by Wells et al. (1993), where the frequency of cunnilingus averaged 2.92 times per month. Multiplying 2.92 by 12 results in 35.04 rounded to 35 times per year.

Sharing Unclean Sex Toys: 15

In the absence of any research data, this frequency is a rough estimate. It assumes that for 20% of sexual encounters insertive sex toys are used.

Males Who Have Sex With Females And Inject Drugs (MSF-IDU)**Sharing Unclean Needles: 38**

Based on Freeman et al.'s (1994) study that reported minimum average injection frequency of heroin to be 234-408; cocaine, 132-206 and speedballs, 135-216, the overall frequency of injection is estimated to be roughly 350 times per year. The study also reported on sharing and cleaning behaviors of IDUs. Based on the percent who shared some (75%) or all (2%) of the time, the frequency of sharing was calculated as follows: $(2 \times 350) + (23 \times 0) + (75 \times 175) / 100 = 138$. Then multiplying by the percent of those who did not clean their needles every time (33%), the average frequency of sharing unclean needles is approximately 46 times per year.

Calculation of a second study's (Latkin et al., 1994) findings on sharing and cleaning frequency resulted in an estimated 32 times per year. Frequency for the matrix is then estimated at 38 based on these and other data.

Insertive Anal Intercourse: 6

This figure is taken directly from the study by Wells et al. (1993), where the frequency of anal intercourse averaged .53 times per month. Multiplying .53 by 12 results in 6.36 rounded to 6 times per year.

Insertive Vaginal Intercourse during Menses: 12

In the absence of data on this behavior for MSF-IDU, a formula based on data for FSF is used (SF Department of Public Health, 1993). For FSF, the frequency of cunnilingus during

menses is approximately 15% of the frequency of cunnilingus without menses. Using this 15%, for MSF-IDU arrives at 15% of 82 (see below) = 12.

Insertive Vaginal Intercourse: 82

Average frequency of vaginal sex per year multiplied by the average percent of time a condom is not used: $90\% \times 91 = 82$ (Wells et al., 1993).

Giving Cunnilingus during Menses: 6

In the absence of data on this behavior for MSF-IDU, a formula based on data for FSF is used (SF Department of Public Health, 1993). For FSF, the frequency of cunnilingus during menses is approximately 15% of the frequency of cunnilingus without menses. Using this 15%, for MSF-IDU arrives at 15% of 41 (see below) = 6.

Giving Cunnilingus: 41

This figure was taken directly from the study by Wells et al. (1993), where the frequency of cunnilingus averaged 3.38 times per month. Multiplying 3.38 by 12 results in 40.56 rounded to 41 times per year.

Other Blood to Blood: 2

In the absence of any research data, this number is a rough estimate. Given the low relative risk score of this act, precise estimates are not necessary.

Receiving Fellatio: 42

This figure was taken directly from the study by Wells et al. (1993), where the frequency of fellatio averaged 3.47 times per month. Multiplying 3.47 by 12 results in 41.64 rounded to 42 times per year.

Sharing Unclean Sex Toys: 22

In the absence of any research data, this frequency is a rough estimate. It assumes that for approximately 25% of sexual encounters insertive sex toys are used.

Females Who Have Sex With Females And Males And Inject Drugs (FSF/M-IDU)

Needle sharing: 40

In the absence of needle sharing data on injection drug using women who have sex with women and men specifically, frequencies for FSM-IDU are used.

All Sexual Behaviors

In the absence of data specific for this population, frequencies of sexual behaviors are estimated to be similar to non-IDU FSF/M.

Females Who Have Sex With Females And Inject Drugs (FSF - IDU)

Sharing Unsterile Needles: 40

In the absence of needle sharing data on injection drug using women who have sex with women specifically, frequencies for FSM-IDU are used.

For all sexual behaviors, frequencies for non-IDU FSF are used.

Females Who Have Sex With Females And Males (FSF/M)

Average annual frequencies of the HIV transmission behaviors for women who have sex with women and men (FSF/M) are calculated based on data from the San Francisco Department of Public Health, AIDS Office study on the health behaviors of lesbian and bisexual women (1993).

Anal Receptive: 9

The average frequency of anal receptive intercourse with a primary partner is calculated to be 8-11 times per year. The frequency of anal intercourse with a partner outside the primary relationship averages to once per year. Based on these data, the average annual frequency for all FSF/M is estimated at 9.

Vaginal Receptive: 46

The average frequency of vaginal intercourse with a primary partner is calculated to be 56-86 per year. The frequency of vaginal intercourse with partners outside of a primary relationship was calculated to be 9-10 times per year. The composite range is estimated to be 38-53, with an overall average frequency of 46.

Give Fellatio: 24

The average frequency is calculated to be 30-42 times per with primary partner and 6 times per year with partners outside of a primary relationship. The frequency for women with primary partners is reduced to a range of 15-21 since only 47% had primary partners. Incorporating the non-primary partner activity, the overall range is 21-27, with an average annual frequency of 24.

Give cunnilingus during menses: 16

The average frequency of cunnilingus during menses for women with their primary partners is 13-18. For cunnilingus with partners outside a primary relationship the average is 4-5. The overall average frequency is estimated to be 16.

Giving and Receiving Cunnilingus: 100

Estimates of frequency of cunnilingus with male and female partners, primary and non-primary are gathered and calculated separately in the study. Receiving cunnilingus from a primary male partner is calculated at 56-78 times per year; from a non-primary male partner, 22-24 times per year. Giving or receiving cunnilingus from a primary female partner is calculated

to be 72-107 times per year, and from a non-primary female partner 38-50 times per year. Since varying proportions of women report having primary and non-primary partners and since for those with female partners giving and receiving cunnilingus is not distinguished, the average annual frequency is estimated to be roughly 100.

Other blood to blood (Fisting): 14

The frequency of fisting for females who have sex with males and females is calculated to be 12-16 times per year with partners in a primary relationship and 4 times per year for partners outside of a primary relationship. Based on these numbers, the overall frequency is estimated at roughly 14.

Sharing Unclean Sex Toys and Digital Sex: 64

Data on sharing unclean sex toys and having digital sex is available only for the FSF/M's activities with female partners. These frequencies were calculated to be 107-149 with primary female partner and 54-67 with non-primary female partner. The non-primary numbers are reduced by half to account for the low percentage of women who had non-primary partners. This results in a range of 134-182. The final frequency of 64 that is estimated is substantially lower to account for the fact that many women were with men primarily.

Vaginal to Vaginal during menses: 16

Since no data exist, the same number as giving cunnilingus during menses is used.

Vaginal to Vaginal: 100

Since no data exist, the same number as giving and receiving cunnilingus is used.

Females Who Have Sex With Males (FSM)

Anal Receptive: 6

Based on an average frequency of unspecified "sex" of 76 times per year and using the data on frequency of anal sex (80% never; 1% at last event (assumed always); 18% sometimes), the equation is $[(80 * 0) + (1 * 76) + (18 * 38)] / 100 = 8$. (Laumann et al., 1994)

Factoring in condom use data (76% never; 16% always) (Bastani and Marcus, 1991), we have the equation: $[(16 * 0) + (76 * 8) + (8 * 4)] / 100 = 6$.

Vaginal Receptive: 62

This frequency is based on the average annual frequency of *intercourse* = 93, from a different source (Leigh, Temple and Trocki, 1993). Applying condom use data (68% never; 14% always) (Bastani and Marcus, 1991), the equation is $[(68 * 93) + (14 * 0) + (18 * 47)] / 100 = 62$.

Giving Fellatio: 33

Based on average annual frequency of "sex" of 76, and frequency of fellatio data (32% never; 19% at last event (assumed always)) (Laumann et al., 1994), the equation is $[(32 * 0) + (20 * 76) + (48 * 38)] / 100 = 33$.

Other Blood to Blood: 6

In the absence of any research data, the same frequency as Receptive Anal Intercourse is used as a rough estimate. Given the low relative risk score of this act, precise estimates are not necessary.

Receive Cunnilingus: 37

Calculations are based on the average annual frequency of “sex” of 76 (Laumann et al., 1994). The percentage of women who engage in cunnilingus is: 27% never and 25% always (Laumann et al., 1994). We then use the equation: $[(27 * 0) + (27 * 76) + (48 * 38)] / 100 = 37$.

Sharing Unclean Sex Toys: 15

In the absence of any research data, this number is a rough estimate. It assumes that for 20% of sexual encounters insertive sex toys are used.

Males Who Have Sex With Females (MSF)

Anal Insertive: 8

The frequency is based on average frequency of “sex” of 78 and behavior data on anal sex (74% never; 2% did it at last event (we are assuming always for purposes of the equation) and 24% sometimes) (Laumann et al., 1994). Average frequency of any anal insertive sex is calculated using the following equation: $(74 * 0) + (2 * 78) + (24 * 39) = 1092$; $1092 / 100 = 11$.

Then taking into account the data on condom use (69% never use condoms; 22% always do, and 9% sometimes do) (Bastani and Marcus, 1991) these percentages are used with the average frequency of anal sex of 11. The following equation is used to calculate unprotected insertive anal intercourse. $(69 * 11) + (22 * 0) + (9 * 5) = 804$; $804 / 100 = 8$.

Vaginal Insertive during Menses: 10

In the absence of data on this behavior for MSF, a formula based on data for FSF is used (SF Department of Public Health, 1993). For FSF, the frequency of cunnilingus during menses is approximately 15% of the frequency of cunnilingus without menses. Using this 15%, for MSF yields at 15% of 66 = 10.

Vaginal Insertive: 66

Frequency is based on the average annual frequency of “sex” and 81% who report always having vaginal intercourse (Laumann, 1994). (Assume 0% never and 19% sometimes) The calculation is $(81 * 78) + (19 * 39) = 7059$; $7059 / 100 = 71$. A different study (Leigh et al., 1993) reported average annual frequency of intercourse to be 83.5. Average frequency is adjusted to 80.

Based on condom use data of 59% never and 18% always (Bastani and Marcus, 1991), $(18 * 0) + (59 * 80) + (23 * 40) = 7059$; $7059 / 100 = 71$.

Giving Cunnilingus during Menses: 6

In the absence of data on this behavior for MSF, a formula based on data for FSF is used (SF Department of Public Health, 1993). For FSF, the frequency of cunnilingus during menses

is approximately 15% of the frequency of cunnilingus without menses. Using this 15%, for MSF arrives at 15% of 41 = 6.

Giving Cunnilingus: 41

The frequency is based on an average frequency of unspecified “sex” of 78 times per year and data on cunnilingus activity (23% never, 29% always and 48% sometimes) (Laumann et al., 1994). Average frequency of cunnilingus is calculated as follows: $(23 * 0) + (29 * 78) + (48 * 39) = 4134$; $4134 / 100 = 41$.

Other blood to blood: 2

In the absence of any research data, this number is a rough estimate. Given the low relative risk score of this act, precise estimates are not necessary.

Receiving Fellatio: 43

Based on an average frequency of unspecified “sex” of 78 times per year and using the data on frequency of fellatio (21% never; 31% always; 48% sometimes) (Laumann et al., 1994), the equation is: $(21 * 0) + (31 * 78) + (48 * 39) = 4290$; $4290 / 100 = 43$.

Sharing Unclean Sex Toys: 15

In the absence of any research data, this number is a rough estimate. It assumes that for 20% of sexual encounters insertive sex toys are used.

Females Who Have Sex With Females (FSF)

Average annual frequencies of the HIV transmission behaviors for women who have sex with women (FSF) were calculated based on data from the San Francisco Department of Public Health, AIDS Office study on the health behaviors of lesbian and bisexual women (1993).

Giving cunnilingus during menses: 14

The average frequency of cunnilingus during menses for women with their primary partners is 11. For cunnilingus with partners outside a primary relationship the average is 6. Frequency outside a primary relationship is reduced by half as the data found that substantially fewer women had this type of partner. Then the two numbers are added: $11 + 3 = 14$.

Cunnilingus: 94

Giving and receiving cunnilingus are not distinguished in these data. The average frequency of cunnilingus for women with their primary partners is calculated to be 78. For cunnilingus with partners outside a primary relationship the average is 31. The frequency outside a primary relationship is reduced by half as the data found that substantially fewer women had this type of partner. Then the two numbers are added: $78 + 16 = 94$.

Other blood to blood (Fisting): 12

The average frequency of fisting with a primary partner is calculated to be 8 times per year. Fisting with non-primary partners shows an average of 6-9 times per year. Again, the

frequency for non-primary partners is reduced by half, and added to the number for primary partners; $8+4 = 12$.

Sharing Sex Toys/Digital sex: 124.

The average frequency of sharing sex toys and engaging in digital sex for women with their primary partners is 103. For this behavior with partners outside a primary relationship the average is 42. The 42 (frequency outside a primary relationship) is reduced by half as the data found that substantially fewer women had this type of partner. Then the two numbers are added: $103 + 21 = 124$.

Vaginal to Vaginal during Menses: 14

In the absence of data on this behavior, a formula based on the data for frequency of cunnilingus during menses is used (SF Department of Public Health, 1993). The frequency of cunnilingus during menses is approximately 15% of the frequency of cunnilingus without menses. This 15% is applied to the frequency estimated for vaginal to vaginal sex without menses (see below). Thus, 15% of 94 = 14.

Vaginal to Vaginal: 94

Since no data exist, the same frequency as giving and receiving cunnilingus is used.

ATTACHMENT 1.B INFORMATION GATHERED ABOUT FREQUENCY OF RISK BEHAVIORS

The following pages present the research data gathered on risk behaviors. The information on the applicable behaviors is presented separately for each behavior group. The behavior groups are listed in order of priority ranking. For many risk behaviors, the findings from several sources are shown. The numbers in parentheses refer to the source of that piece of information. The numbered sources are listed in the last section of Attachment 1.C.

Males who have Sex with Males and Inject Drugs (MSM-IDU)

MSM-IDU Sharing Needles 80% share needles; 85% do not always clean (13) Gay IDU's are 2.7 time more likely to share needles than heterosexual IDUs. (24) Among <u>gays and bisexuals</u> who had injected drugs during previous 6 months, percent who had shared unclean needles: 14% (7)	MSM-IDUs Receptive Anal Intercourse % who engaged in RAI during prior 6 months: 69% % of total engaging in any anal sex who never use condoms: 32% (15) 54% report using condoms during prior six months. (13)
MSM-IDUs Insertive Anal Intercourse % who engaged in IAI during prior 6 months: 54% % of total engaging in any anal sex who never use condoms: 32% (15) 54% report using condoms during prior six months. (13)	MSM-IDUs Give Fellatio % who engaged during prior 6 months: 87% % of total engaging in any oral sex who never use condoms: 44% (15)
MSM-IDUs Receive Fellatio % who engaged during prior 6 months: 87% % of total engaging in any oral sex who never use condoms: 44% (15)	

Males who have Sex with Males and Females and Inject Drugs (MSM/F-IDU)

MSM/F-IDU Sharing Needles 90% share needles; 91% do not always clean (13) <u>Among gays and bisexuals who had injected drugs during previous 6 months, percent who had shared unclean needles:</u> 14% (7) % sharing unclean needles in prev. 90 days: 12% (28)	MSM/F IDUs Insertive Vaginal Intercourse 64% engaged in vaginal sex; 41% never used condoms (15) 49% report using condoms during prior six months (13)
MSM/F IDU Receptive Anal Intercourse % who engaged in past 6 months: 20% 52% of total MSM/F who had anal sex with men or women never used condoms (15)	MSM/F IDU Insertive Anal Intercourse % with men in past 6 months: 33% % with women in past 6 months: 16% 52% of total MSM/F who had anal sex with men or women never used condoms (15)
MSM/F IDU Give Fellatio % who engaged in past 6 months: 36% 47% of total MSM/F who received fellatio from men or women never used condoms (15)	MSM/F IDU Receive Fellatio % with men in past 6 months: 53% % with women in past 6 months: 47% 47% of total MSM/F who received fellatio from men or women never used condoms (15)
MSM/F IDU Give Cunnilingus % who engaged in past 6 months: 42% (15)	

Males who have Sex with Males (MSM)

<p>MSM Receptive Anal Intercourse (RAI)</p> <p>ages 18-29: 26% unprotected RAI in last year (6) ages 18-25: 32% had unprot. RAI in last 6 mos. (25% reported sex with men <u>and</u> women in past 3 years) (30)</p> <p>Gay <u>and</u> bisexual men : Unprotected receptive anal intercourse with ejaculation: 11% (25)</p> <p>24-35% of MSM never engaged in AI during past year. 14% were always receptive; 24% were never receptive 71% always used condom; 21% never used condom (2)</p> <p>Gay and bisexual: 23% had RAI in last 90 days (28)</p> <p>Asian/PI: 17% have unprotected anal intercourse with ejaculation. 13% are receptive (8)</p> <p>(See Any Anal Intercourse below)</p>	<p>MSM Insertive Anal Intercourse</p> <p>ages 18-25: 34% had unprot. RAI in last 6 mos. (25% of sample reported sex with men and women in past 3 years) (30)</p> <p>24-35% of MSM never engaged in AI during past year. 16% were always insertive 35% were never insertive 76% always used a condom 16% never used a condom (2)</p> <p>Asian/PI: 17% have unprotected anal intercourse with ejaculation.(8)</p> <p>Gay and bisexual: 21% in last 90 days (28)</p> <p>(See Any Anal Intercourse)</p>
<p style="text-align: center;">Any Anal Intercourse—Receptive or Insertive</p> <p>Average annual freq. of “sex”: 94 (median: 45) % having unprot. anal intercourse: 45.7% (Receptive or insertive not specified) (26)</p> <p>Average annual frequency of unprotected anal intercourse among <u>substance abusers</u> w/ primary partner: 114; w/non-primary partners: 88. 30% of substance abusers report unprotected anal intercourse w/ejaculation (29)</p> <p>Any unprotected anal intercourse: 33% (25)</p> <p>Af. Amer. >50% had AI in past 6 mos. , which is higher than White men in other studies (15% and 20%).(9) 9-15 year old African American youth: 21% have had insertive <u>or</u> receptive anal sex (3)</p> <p>Ages 17-22, gay/bisexual: % having unprotected anal intercourse in previous 6 months: White: 28%; Af. Am.: 39%; Latino: 40%; A/PI: 27%; Other: 45% ; Gay only: 36% (7)</p> <p>% engaging in unprotected anal intercourse: Ages < 30: 44%; Ages > 30: 18% (27)</p>	
<p>MSM Performing Fellatio</p> <p>ages 18-25: 19% with ejaculation last 6 mos. 82% w/o ejaculation (25% reported sex with men <u>and</u> women in past 3 years) (30)</p> <p>Gay <u>and</u> bisexual men: Performed fellatio with ejaculation 21% Always used condoms: 4% (25)</p> <p>(See “Any Fellatio”)</p>	<p>MSM Receiving Fellatio</p> <p>ages 18-25: 24% with ejaculation last 6 mos. 83% w/o ejaculation (25% reported sex with men <u>and</u> women in past 3 years) (30)</p> <p>(See “Any Fellatio”)</p>
<p style="text-align: center;">Any Fellatio</p> <p>% engaged in fellatio during last 6 months: 17-19 y.o. 80% without ejaculation; 35% with ejaculation 20-22 y.o. 85% without ejaculation; 36% with ejaculation (7)</p>	

Males who have Sex with Males and Females (MSM/F)

MSM/F Anal Intercourse

Average annual freq. of "sex": 94 (median: 45)

% having unprot. anal intercourse 45.7%

(Receptive or insertive not specified; sample represents gay and bisexual subjects) (26)

17-22 y.o.:

30% had unprotected anal intercourse during previous 6 mos (7)

Gay and bisexual men :

Unprotected receptive anal
intercourse with ejaculation: 11%

Any unprotected anal intercourse: 33% (25)

Females who have Sex with Males and Inject Drugs (FSM-IDU)

<p>FSM-IDU Sharing Needles</p> <p>Among female IDUs average injection frequency per year (minimum):</p> <p>heroin: 243-438</p> <p>cocaine: 107-164</p> <p>speedballs: 123-202</p> <p>70% of female IDUs shared needles at least some of the time; 4% always shared; 35% of those who shared did not always clean needles. (23)</p> <p>Women are more likely to share and with more partners, than are men. 74% shared needles more than half the time. (22)</p> <p>Mean of 18 times per year for IDUs in treatment who do share at all (63%).</p> <p>Mean of 30 times per year for IDUs not in treatment who do share (79%).</p> <p>Those in treatment also more likely to have “safe” injections (17)</p> <p>Average frequency of sharing needles: 70 (all IDUs)</p> <p>33% never share needles; of those who share, 34% always clean their needles. (18)</p> <p>66.3% report sharing needles prior to needle exchange program and 35.5% shared 3 years after participation . (19)</p> <table><tr><td></td><td>Before exchange</td><td>After exchange</td></tr><tr><td>Avg. Annual Freq. of:</td><td></td><td></td></tr><tr><td>Obtaining used syringes</td><td>684</td><td>432</td></tr><tr><td>Passing a used syringe</td><td>1200</td><td>780</td></tr><tr><td>Bleach use</td><td>852</td><td>127</td></tr></table> <p>(20)</p> <p>Crack users were more likely to share unclean needles. (21)</p>		Before exchange	After exchange	Avg. Annual Freq. of:			Obtaining used syringes	684	432	Passing a used syringe	1200	780	Bleach use	852	127	<p>FSM IDU Perform Fellatio</p> <p>89% of those sexually active engage in fellatio;</p> <p>Average annual frequency: 48 (10)</p>
	Before exchange	After exchange														
Avg. Annual Freq. of:																
Obtaining used syringes	684	432														
Passing a used syringe	1200	780														
Bleach use	852	127														
<p>FSM-IDU Receive Cunnilingus</p> <p>Average # of times per year for sexually active women = 35 (26% engage in cunnilingus). (10)</p>	<p>FSM-IDU Receptive Anal Intercourse</p> <p>Average # times per year for women who are sexually active: 5.88 . (10)</p>															

Males who have Sex with Females and Inject Drugs (MSF-IDU)

MSF-IDU Insertive Anal Intercourse Average # of times per year for sexually active men: 6.4 (10)	MSF-IDU Giving Cunnilingus Average per year for sexually active men: 40.6 (10)															
MSF-IDU Insertive Vaginal Intercourse Average # of times per year: 90.8 Used a condom an average of 10.3% of the time <u>Median</u> # of times used a condom = 0 (10) 31% use condoms (13) 12% (of those w/multiple partners) to 13% (of those w/one partner) always use condoms. (23)	MSF-IDU Sharing Needles Among Male IDUs average injection frequency per year (minimum): heroin: 234-408 cocaine: 132-206 speedballs: 135-216 75% of male IDUs shared needles some of the time; 2% always shared; 33% of those did not always clean needles. (23) 34% shared needles more than half the time. (22) MSF: 80% share needles; 87% do not always clean. (13) Mean of 18 times per year for all IDUs in treatment who do share at all (63%). Mean of 30 times per year for IDUs not in treatment who do share (79%). Those in treatment also more likely to have "safe" injections (17) Average frequency of sharing needles: 70 (all IDUs) 33% never share needles; of those who share, 34% always clean their needles. (18) 66.3% report sharing needles prior to needle exchange program and 35.5% shared 3 years after participation . (19) <table><tr><td></td><td>Before exchange</td><td>After exchange</td></tr><tr><td>Avg. Annual Freq. of:</td><td></td><td></td></tr><tr><td>Obtaining used syringes</td><td>684</td><td>432</td></tr><tr><td>Passing a used syringe</td><td>1200</td><td>780</td></tr><tr><td>Bleach use</td><td>852</td><td>127</td></tr></table> (20) Crack users were more likely to share unclean needles. (21)		Before exchange	After exchange	Avg. Annual Freq. of:			Obtaining used syringes	684	432	Passing a used syringe	1200	780	Bleach use	852	127
	Before exchange	After exchange														
Avg. Annual Freq. of:																
Obtaining used syringes	684	432														
Passing a used syringe	1200	780														
Bleach use	852	127														
MSF-IDU Receive Fellatio Average Annual frequency for sexually active men: 42 (10)																

Females who have Sex with Females and Males and Inject Drugs (FSF/M-IDU)

FSF/M-IDU Sharing Needles	FSF/M-IDU Sexual Behaviors															
<p>Among FSF and FSF/M IDUs (n=11) none reported sharing needles. (12)</p> <p>The following information applies to all female IDU's:</p> <p>Among female IDUs average injection frequency per year (minimum):</p> <p>heroin: 243-438</p> <p>cocaine: 107-164</p> <p>speedballs: 123-202</p> <p>70% of female IDUs shared needles at least some of the time; 4% always shared; 35% of those who shared did not always clean needles. (23)</p> <p>Women are more likely to share and with more partners, than are men. 74% shared needles more than half the time. (22)</p> <p>Mean of 18 times per year for IDUs in treatment who do share at all (63%).</p> <p>Mean of 30 times per year for IDUs not in treatment who do share (79%).</p> <p>Those in treatment also more likely to have "safe" injections. (17)</p> <p>Average frequency of sharing needles: 70 (all IDUs)</p> <p>33% never share needles; of those who share, 34% always clean their needles. (18)</p> <p>66.3% report sharing needles prior to needle exchange program and 35.5% shared 3 years after participation. (19)</p> <table><tr><td></td><td>Before exchange</td><td>After exchange</td></tr><tr><td>Avg. Annual Freq. of:</td><td></td><td></td></tr><tr><td>Obtaining used syringes</td><td>684</td><td>432</td></tr><tr><td>Passing a used syringe</td><td>1200</td><td>780</td></tr><tr><td>Bleach use</td><td>852</td><td>127</td></tr></table> <p>(20)</p> <p>Crack users were more likely to share unclean needles. (21)</p>		Before exchange	After exchange	Avg. Annual Freq. of:			Obtaining used syringes	684	432	Passing a used syringe	1200	780	Bleach use	852	127	<p>No research data found.</p>
	Before exchange	After exchange														
Avg. Annual Freq. of:																
Obtaining used syringes	684	432														
Passing a used syringe	1200	780														
Bleach use	852	127														

Females who have Sex with Females and Inject Drugs (FSF-IDU)

FSF-IDU Sharing Needles	FSF-IDU Sexual Behaviors															
<p>Among FSF and FSF/M IDUs (n=11) none reported sharing needles. (12)</p> <p>The following information applies to all female IDU's: Among female IDUs average injection frequency per year (minimum): heroin: 243-438 cocaine: 107-164 speedballs: 123-202 70% of female IDUs shared needles at least some of the time; 4% always shared; 35% of those who shared did not always clean needles. (23)</p> <p>Women are more likely to share and with more partners, than are men. 74% shared needles more than half the time. (22)</p> <p>Mean of 18 times per year for IDUs in treatment who do share at all (63%). Mean of 30 times per year for IDUs not in treatment who do share (79%). Those in treatment also more likely to have "safe" injections. (17)</p> <p>Average frequency of sharing needles: 70 (all IDUs) 33% never share needles; of those who share, 34% always clean their needles. (18)</p> <p>66.3% report sharing needles prior to needle exchange program and 35.5% shared 3 years after participation . (19)</p> <table><tr><td></td><td>Before exchange</td><td>After exchange</td></tr><tr><td>Avg. Annual Freq. of:</td><td></td><td></td></tr><tr><td>Obtaining used syringes</td><td>684</td><td>432</td></tr><tr><td>Passing a used syringe</td><td>1200</td><td>780</td></tr><tr><td>Bleach use</td><td>852</td><td>127</td></tr></table> <p>(20)</p> <p>Crack users were more likely to share unclean needles. (21)</p>		Before exchange	After exchange	Avg. Annual Freq. of:			Obtaining used syringes	684	432	Passing a used syringe	1200	780	Bleach use	852	127	<p>No research data found.</p>
	Before exchange	After exchange														
Avg. Annual Freq. of:																
Obtaining used syringes	684	432														
Passing a used syringe	1200	780														
Bleach use	852	127														

Females who have Sex with Females and Males (FSF/M)

FSF/M Receptive Anal Intercourse Average # of times per year unprotected with a primary partner: 8-11 For women with partners outside of a primary relationship: 1 (12)	FSF/M Receptive Vaginal Intercourse Average # of times per year unprotected with a primary partner. 58-86 For women with partners outside of a primary relationship: average # of times per year with these "secondary" partners. 9-10 (12)
FSF/M Perform Fellatio Average frequency per year with a primary partner: 34-46 Average frequency per year with a partner outside a primary relationship: 5.7 (12)	FSF/M Receive Cunnilingus Average frequency from a <u>male</u> partner in primary relationship: 56-78 Average frequency per year with a <u>male</u> partner outside a primary relationship: 22-24 With female partners: Primary relationship: 72-107 Outside primary relationship: 38-50 (12)
FSF/M Sex toys/Digital sex Primary relationship: 107-149 Outside primary relationship: 54-67 (12)	FSF/M Cunnilingus during menses Primary relationship: 13-18 Outside primary relationship: 4-5 (12)
FSF/M Other Blood to Blood Fisting Primary relationship: 12-16 Outside primary relationship: 4 (12)	FSF/M Vaginal to Vaginal No research data found.

Females who have Sex with Males (FSM)

FSM Anal Receptive

Women "have sex" with either gender 75.6 times per year.

Anal:	Ever done it	Did it during last year	Did it at last event
All	20%	9%	1%
AfAm	10%	6%	2%
Lat.	17%	13%	1%
White	23%	8%	1%

% who always used a condom during anal sex:

Marriages	13%
Cohabitations	11%
Long term Ptnrs.	21%
Short term Ptnrs.	50% (1)

76% of women never use a condom

16% always use a condom (2)

FSM Vaginal Receptive

Women "have sex" with either gender 75.6 times per year.
% who always have vaginal sex:

Marriages	81%
Cohabitations	77%
Long term Ptnrs.	75%
Short term Ptnrs.	86% (1)

Median frequency of vaginal sex per year: 50 (4)

68% of women never use a condom during vaginal intercourse; 14% always use one (2)

Af. Amer. men and women mean # unprotected vaginal intercourse during prior month: 8.75. (5)

$8.75 \times 12 = 105 \text{ times per year.}$

Average frequency of intercourse during past year: 92.8 (14)

FSM Perform Fellatio

Women "have sex" with either gender 75.6 times per year.

Fellatio:

	Ever done it	Did it at last event
All	68%	19%
AfAm	34%	9%
Lat.	60%	19%
White	75%	21% (1)

FSM Receive Cunnilingus

Women "have sex" with either gender 75.6 times per year.
73% had ever had it in lifetime (from either gender)
20% received cunnilingus during last sexual event (w/men only)

% who always receive cunnilingus: 12-30% (1)

Males who have Sex with Females (MSF)

<p>MSF Giving cunnilingus</p> <p>Average frequency of “sex” per year: 78. 77% had ever had any kind of oral sex during lifetime. 27% had cunnilingus last time they had sex. 15-29% always have cunnilingus. (1)</p>	<p>MSF Insertive Vaginal Intercourse</p> <p>Average frequency of “sex” per year: 78 78-81% always have vaginal intercourse. (1)</p> <p>Average frequency of intercourse per year: 83.5 (14)</p> <p>59% never use a condom 18% always use a condom (2)</p> <p>Af. Amer. men <u>and</u> women mean # unprotected vaginal intercourse during prior month: 8.75. (5) $8.75 \times 12 = 105 \text{ times per year.}$</p>
<p>MSF Anal Insertive</p> <p>Average frequency of “sex” per year: 78. 26% ever had anal sex in lifetime with either gender. 10% did it in last year with women. 2% did it at last event. 13-63% always use a condom (depending on relationship) (1)</p> <p>69% never used a condom; 22% always used a condom. (2)</p>	<p>MSF Receiving Fellatio</p> <p>Average frequency of “sex” per year: 78. 79% ever had oral sex in lifetime with either gender. 28% received fellatio at last event. 12-31% always receive fellatio when having sex. (1)</p>

Females who have Sex with Females (FSF)

FSF Cunnilingus Unprotected: Average frequency with primary partner: 67-89 Average frequency outside of primary relationship: 28-34 (12)	FSF Cunnilingus during Menses Unprotected: Average frequency with primary partner: 10-12 Average frequency outside of primary relationship: 5-6 (12)
FSF - Sharing Sex Toys, Digital Sex Unprotected: Average frequency with primary partner: 88-118 Average frequency outside of primary relationship: 38-49 (12)	FSF - Other Blood to Blood Fisting: Average frequency with primary partner: 8-9 Average frequency outside of primary relationship: 6-9 (12)

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Results of 13 cross sectional surveys; total of 5,956 interviews over 6.5 years in San Francisco.

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769 out-of-treatment IDUs in Paterson, New Jersey.
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Data from the Northern Italian Seronegative Drug Addicts study. 1394 male and 367 female.
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395 males surveyed in Santa Clara County in public venues. 89% gay and 10% bisexual; 69% in 20s and 30s.

26. Barrett DC, Bolan G, Doll L, Joy D, Counts K and Harrison J (in press). Coping strategies, substance use, sexual activity and HIV sexual risks in a sample of gay male STD patients. *Journal of Applied Social Psychology*.
416 gay and bisexual men who were seeking services at the SF DPH STD Clinic. 80% were under age 40. 67% White.
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Telephone survey of 401 gay men in San Francisco.
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314 gay and bisexual men admitted for services at 18th Street Services in San Francisco.
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Same as Source 28.
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Conducted by CAPS. Self-administered questionnaire survey of 99 "gay" men aged 18-25 in Santa Cruz, CA, Santa Barbara, CA and Eugene, OR. Sample taken from men leaving settings frequented by young gay men. 25% of the sample had had sex with men and women during past 3 years.

ATTACHMENT 2 ESTIMATES OF RELATIVE RISK AND INFECTIVITY RATES

The examination of relative risk and infectivity rates included an analysis of the relevant literature and interviews with approximately 12 researchers about the efforts of the Priority-Setting Committee. A summary of information gained from these conversations and a table containing estimates of relative risk or infectivity rates is included below.

Essentially, the Priority-Setting Committee is developing what the policy arena would consider a complex model and the scientific community would consider a simple model. The model (Phases I and II, particularly) is not comprehensive or complex enough to take into account all the elements of risk for all the sub-communities where risk occurs; it is not sufficient to accurately predict the number of new infections that will occur, and this troubles many researchers, especially epidemiologists who develop models as predictive tools. As one said, “Modeling can be falsely reassuring if the data are shaky.” The model, though, is not intended as a epidemiology tool, but rather as a guide to policy-making. To be useful as a policy aid, the model should do (at least) two things:

- Take into account the most important factors about risk, and
- Serve as a guide to policy rather than as a concrete answer.

Because the numbers used in Phase I are estimates, the results should not make the decision, but rather inform the decision. The committee will have to make the policy recommendations, using the results of the model as a guide. Almost every researcher, professor, and epidemiologist spoken to stressed this point; some recommended against modeling, others urged caution in trusting the results too much. Using a model to aid in this type of policy recommendation can be useful if the process doesn’t get too bogged down by adding more and more factors or tinkering with the formula endlessly to get it to produce the answers desired by the committee. At a minimum, it is a way that the committee can examine the issue of what groups are most in need of HIV prevention efforts; at best, it can provide information that can form the basis of the decision.

The second issue is relative risk and infectivity rates. Relative risk refers to how much more risky one act is than another. For example, if vaginal receptive intercourse is arbitrarily set at 3, how much more or less risky are other acts, such as sharing needles or giving fellatio? Infectivity rates are usually estimates of the percent chance of becoming exposed per episode. These estimates vary from study to study.

Estimates of both relative risk and infectivity rates are problematic, because no one is certain of the numbers. A great deal of individual difference seems to exist. Also, the probability varies, depending on how infectious the partner is. It appears that people in the very early stage of HIV (from infection to some time after antibodies develop) are highly viremic; those in the stage from a few months after infection to just before they become symptomatic are less viremic; viremia increases again in the symptomatic state (but probably does not reach the levels of viremia of the early stage); viremia then decreases sometime after an AIDS-defining condition exists. The fluctuating viremia makes it difficult to establish a per-episode infectivity

rate. The issue of viremia fluctuations can be ignored in the HPPC Priority-Setting Phase I model, since the model applies to groups of people, not individuals. Within each of the behavior groups, there are people at all stages of viremia. (Taking it into account is also impractical for policy-setting.)

A second problem in estimating relative risk or infectivity rates is that less information is known about the lower-risk acts. Infectivity and relative risk has been studied for sharing needles, anal receptive sex, and vaginal receptive sex—the acts with the highest risk. It is more difficult to determine the risk of fellatio, since most people in the studies engaged in both intercourse and fellatio. But there is a general agreement among researchers that several of the acts are of low risk (e.g., cunnilingus, vaginal to vaginal contact).

A third issue is that some researchers cite infectivity rates as estimates of the percent chance of becoming infected per partnership, and others cite rates per exposure (act). Estimates per partnership may be more reliable. These estimates come from several good studies of discordant couples; these studies do not examine what acts the couples perform, but track when/if the negative partner seroconverts. The benefit of this approach is that the information may be more reliable; the drawback is that this information cannot be found for all the behavior groups—most of the discordant couples studies are of heterosexual couples. Additionally, for many who are targeted with prevention interventions, per-relationship is a poor measure, since ‘partnerships’ may be of very short duration.

Estimates of Relative Risk and Infectivity Rates

(Note: Numbers at the top of columns refer to studies and researchers listed below the table.)

Studies/Researchers	1	2	3	4	5	6	7	8	9	10	11
	Relative Risk						Infectivity Rates				
Sharing needles	9	15	9				.0067	.0029			
Anal receptive intercourse	9	10		15	4.2			.006	.005-.01	.1-.3* .001-.01** .005-.01***	
Vaginal receptive intercourse	3	3	3	3	3		.0022	.004			.002
Giving fellatio	1	.02						.0001			
Giving cunnilingus	1	.01						.0001			
Giving cunnilingus /menses	2	.02						.0001			
Anal insertive intercourse								.002			
Vaginal insertive intercourse	.3	1.5						.002			
Vaginal insertive intercourse /menses		2						.002			
Receiving fellatio	1	.001						0			
Receiving cunnilingus	1	.002						0			
Frottage	.5	.001						0			
Frottage /menses	1	.002						0			
Sex toys/ digital sex	.01	.01						0			
"Blood to blood"	.5										

* Depending on viremia.

1. Nancy Padian, UCSF personal communications; also Padian N et al. (1987). Male-to-female transmission of Human Immunodeficiency Virus. *JAMA*.
2. David Sokel, Family Health International, AIDSCAP Department, personal communications.

3. Edward Kaplan and Robert Heimer, Yale University, personal communication; also Kaplan and Heimer (1992). A model-based estimate of HIV infectivity via needle sharing. *Journal of Acquired Immune Deficiency Syndromes*, 5, 1116-1118; and Evaluating a needle exchange program in a small city: models for testing HIV-1 risk reduction. Unpublished manuscript.
4. (1992). European study group on heterosexual transmission of HIV: comparison of female-to-male and male-to-female transmission of HIV in 563 stable couples. *British Medical Journal*, 304, 809-813.
5. Saracco A et al. (1993). Man-to-woman sexual transmission of HIV: longitudinal study of 343 steady partners of infected men. *Journal of Acquired Immune Deficiency Syndromes*, 6, 497-502.
6. Nicolosi A et al. (1994). The efficiency of male-to-female and female-to-male sexual transmission of the Human Immunodeficiency Virus: a study of 730 stable couples. Italian Study Group on HIV Heterosexual Transmission. *Epidemiology*, 6, 570-575.
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9. DeGruttola V et al. (1989). Infectiousness of HIV between male homosexual partners. *Journal of Clinical Epidemiology*.
10. Jacquez J et al. (1994). Role of the primary infection in epidemics of HIV infection in gay cohorts. *Journal of Acquired Immune Deficiency Syndromes*, 7, 1169-1184.
11. Huston N and Hulley S (1988). Preventing the heterosexual spread of AIDS; are we giving our patients the best advice? *JAMA*.

ATTACHMENT 3 ESTIMATES OF THE FREQUENCY AND RELATIVE RISK OF BEHAVIORS AMONG TRANSGENDER PERSONS

Transgender is a term that refers to persons whose gender identity is different than the anatomical sex they were born with. Transgender is also an umbrella term used to describe different types of gender identities and gender expressions (roles). There are male-to-female (MTF) and female-to-male (FTM) transgendered persons (Whitlock, *Transgender Outlook*, 1995). Gender identity is defined to mean a person's various individual attributes as they are understood to be masculine and/or feminine (San Francisco City Attorney's Office, *Legislative Digest of the Gender Identity Discrimination Ordinance*, 1994).

Many transgendered persons live in the gender in which they are most comfortable on a "24/7" (24 hours a day, seven days a week) basis but choose not to undergo gender confirmation surgery (GCS) to alter their genitalia. For those persons seeking surgery, there are several options available. Those that alter the breasts (breast enhancement or mastectomy) generally do not alter HIV risk and are not included in this discussion of pre-operative or post-operative status. The surgeries of consideration include vaginalplasty (MTF), and testicular implants, phalloplasty, and genitalplasty (FTM). For more information, please refer to Lou Sullivan's *Information for the Female-to-Male Cross Dresser and Transsexual*; Kiki Whitlock's *Transgender Outlook*; Harry Benjamin's *Standards of Care*; and Gianna Israel's *Recommended Guidelines for Transgender Care*.

To aid those less familiar with transgender issues, the following chart lists pre- and post-operative FTM and MTF and indicates whether each risk act is possible. The actual practice of the act depends on personal preference and sexual orientation.

Risk Act Potential among Transgender FTM and MTF				
Risk Behavior	FTM No GCS	FTM GCS	MTF No GCS	MTF GCS
Needle use (Hormones)	yes	yes	yes	yes
Anal receptive intercourse	yes	yes	yes	yes
Anal insertive intercourse	no	yes*	yes	no
Vaginal receptive intercourse	yes	no	no	yes
Vaginal insertive intercourse	no	yes	yes	no
Giving fellatio	yes	yes	yes	yes
Receiving fellatio	no	yes	yes	no
Giving cunnilingus	yes	yes	yes	yes
Receiving cunnilingus	yes	no	no	yes
Sharing sex toys/dildos/fingers	yes	yes	yes	yes

* Since semen is not present in transgender FTM post-operative persons, risk to the partner is lower than risk from genetic male partners.

Interviews with members of the transgender community and providers serving this population were conducted to identify the ways in which risk for HIV is different for transgender persons. Interviewees described several issues that alter the frequencies of transmission behaviors for transgender persons. The literature on HIV risk and the transgender community was also consulted, although studies mainly focus on transgender sex workers. Issues affecting frequency of risk acts are summarized below.

Frequency of needle-sharing may be higher for members of the transgender community, due to frequent use of hormones by injection. Many transgender persons inject hormones weekly and, according to interviewees, needle sharing is common. This is in addition to any needle sharing by injection drug-using transgender persons.

There are some considerations about frequency of the various sexual behaviors that can transmit HIV. The behaviors for which transgender persons may show increased or decreased risk for becoming infected are listed below.

- Frequency of unprotected receptive anal intercourse may be higher for pre-operative MTF-IDU, as they are likely to be sex workers and may engage in unprotected sex to earn money. Sex workers are more likely to engage in anal intercourse with clients than with steady partners (Elifson et al., 1993). This issue is included in the co-factor discussion of commercial sex work.

- Post-operative MTF having sex with men may engage in receptive anal intercourse more frequently than biological females who have sex with men.
- Frequency of vaginal receptive intercourse for post-operative MTF is most likely similar to biological FSM, although some interviewees believe that the act carries a higher relative risk due to less natural lubrication in the vagina, due to the tender tissue during the healing process in the first year after gender confirmation surgery.
- Informants reported that post-operative FTM may have a lower frequency of insertive anal intercourse as well as insertive vaginal intercourse. In addition, the risk to the partner would be lower, as no semen is present.
- The use of sex toys may have higher frequency for pre-operative FTM who have sex with women.
- Frequency of sexual activity in general may be higher for FTM during the first nine months of taking hormones due to an increase in sex drive. This may result in less discretion regarding sex partners and may also reflect in more frequent unprotected high-risk behavior, such as performing fellatio and receptive anal intercourse.
- Post-operative FTM who have sex with women may perform cunnilingus more frequently than biological MSF.
- Pre-operative FTM who have sex with men may be more likely to engage in receptive anal intercourse than receptive vaginal intercourse.

CHAPTER 6 - RESOURCE ALLOCATION

I. INTRODUCTION

This chapter discusses and presents the resource allocation recommendations developed by the Resource Allocation/Resource Inventory Committee and adopted by the San Francisco HIV Prevention Planning Council (HPPC) during 1996. This chapter contains six sections and three attachments:

I.	Introduction
II.	Committee Operations
III.	Key Considerations for Resource Allocation
IV.	Summary of Recommendations
V.	Implementation of Recommendations
VI	Conclusions
Attach. 1	Complete Resource Allocation Recommendations
Attach. 2	Activities Considered for Set-aside Funding
Attach. 3	Letter of Concurrence with CDC Application

The last time the SFDPH released a competitive RFP for HIV prevention was in 1993. The SFDPH intended to reallocate prevention funding during 1995. However, the priority-setting process of ranking behavioral risk populations and the guidelines for strategies and interventions were not completed until the end of 1995. Further the DPH wanted to give providers additional time to become familiar with the principle recommendations contained within the plan. Therefore, the release of a competitive RFP was delayed until 1996.

Given that the resource allocation recommendations advance the planning efforts of the prior two planning years, an understanding of the themes of previous years is a necessary context for the recommendations. In 1994, the first year of the HIV prevention planning process, the Council formed several principles for priority-setting. These principles can be summarized as follows:

- Risk of contracting HIV is the factor that should drive prevention;
- Risk is determined by behavior;
- Behavior is influenced by co-factors; and
- Prevention activities should be characterized by the risk of behavioral groups, not by traditional "transmission" or "risk" groups.

In 1995, the second year of prevention planning, the Priority-Setting Criteria Committee used the principles developed in the first year as the basis for the priority-setting model. Four phases comprised the priority-setting model. Two of the phases construct the priority-setting matrix which rank behavioral risk populations; the third identifies categories of co-factors and describes their role in HIV transmission, and the fourth accommodates provider-defined target

groups within a prevention planning process that is based on behavioral risk populations¹. In 1995 when the priority-setting criteria were established, the Committee noted that Phase IV would occur during the application process, and that providers would be given specific guidance within the RFP in order to prepare applications.

The role of the 1996 Resource Allocation/Resource Inventory Committee was to develop this specific guidance. The Committee was asked to focus on three broad areas. One was developing guidelines or criteria for the RFP. A second was recommendations for activities using set-aside funds. The third was the resource inventory. (The resource inventory is presented in the next chapter, Chapter 7.)

II. COMMITTEE OPERATIONS

Tasks of the Committee

Initial guidance for the committee tasks came from the HPPC Co-Chairs:

- a) Determine the broad, general guidelines for the language of the prevention-based RFPs;
- b) Outline the overall parameters within which the AO will make funding decisions;
- c) Serve as representatives in the review of funding proposals along with other HPPC members, provided there is no conflict of interest;
- d) Assess the resource allocation process and advise the HPPC and AO regarding improvements in it;
- e) Revise, as needed, the resource inventory structure and methods for gaining information on prevention programs city/county-wide; and
- f) Update the resource inventory based on current data.

The Committee completed all these tasks, except Task d) assess the resource allocation process. That task was postponed until 1997 because the RFP was issued by the AIDS Office later than anticipated and it was agreed that this task deserved a significant amount of time.

The Committee's task was revised or refined repeatedly over the year. At two points, clarification and agreement were needed and meetings were held with the Committee Chair, the three Co-Chairs, Director of the AIDS Office, and the Chief of the Health Services and Prevention Branch. In May, the topic of the meeting was the set-aside activities (described later in this chapter), and in August the topic was the responsibilities for resource allocation and methods for better communication between the AIDS Office and HPPC. Points discussed at the August meeting were:

- The AIDS Office in conjunction with the Department of Public Health are solely responsible for all decisions pertaining to allocations of dollar amounts to the populations

¹ This element of the priority-setting model also led to the development of HPPC recommendations for provider-level needs assessments, described in Chapter 9 - Strategic Evaluation.

and activities prioritized by the HIV Prevention Planning Council (HPPC) and for decisions pertaining to contracting, such as sole-sourcing contracts.

- The AIDS Office is solely responsible for creating the narrative of the RFP, establishing the scoring process for the standard criteria used for every AIDS Office RFP, establishing a minimum score for eligible behavioral risk populations, and conducting the review process for the RFP.
- The HPPC is solely responsible for structure of the RFP.
- Preliminary recommendations for improving communication included the development of a formal document developed collaboratively between HPPC and AO discussing specific roles and responsibilities and communication between parties; review of RFP narrative by Council members without conflict of interest; and detailed updates of the content of the RFP to Steering Committee that do not give advance knowledge to possible applicants. Further, suggestions were to hear from key persons within the Department of Public Health about their perspectives on prevention. The development of the Roles and Responsibility document will continue into 1997.

Committee Membership

When formed, the Resource Allocation/Resource Inventory Committee comprised ten members: six Council members, including the Community Co-Chair and the Department of Public Health Co-Chair, two additional AIDS Office staff, and the prior year's Community Co-Chairs. During the year, membership change and attrition occurred. Several key individuals were unable to continue participation and this particular attrition contributed to confusion about the directions that could or should be taken with resource allocation. By the end of the year the committee had five members, including one of the 1996 Community Co-Chairs, the DPH Co-Chair, two other Council members, and one AIDS Office staff (other than the Co-Chair).

The Committee met 17 times between February and November, and between meetings received faxes, read reports, participated in telephone conversations with the Committee Chair, and prepared for the next Committee meeting. One member of the HPPC Process Evaluation Team acted as a participant observer, and the Committee was also supported by a logistical consultant. The technical assistance consultant and AIDS Office staff provided extensive support to the Committee in preparing reports, assembling information, drafting recommendations from discussions and guiding the planning process. The Committee members used these reports in their discussions. A staff member of the AIDS Office worked with the Committee to develop the Resource Inventory. He researched the information currently available about prevention contracts, drafted presentation "models" for the information, and aided the Committee in understanding what types of information would be available in the future. Once the Committee established the format (model) for the Inventory, the AIDS Office staff completed the inventory and its associated text.

Process for Decision Making

Decisions at the Committee level were made through discussion and vote. Generally, the Committee used a single-text negotiation method. That is to say, Committee members would engage in discussion of the concepts and issues. The technical support consultant drafted the main points into a document for members to review between meetings. At the next meeting, time was used to clarify or come to agreement on points in the draft and discuss new issues. Again, the draft was revised and new material added in preparation for the next meeting. This process continued until agreement was reached on the text. The Committee took votes on each of the main issues. In many instances these were “straw polls” to assess the level of agreement, in other instances these were formal Committee votes to adopt a course of action or recommendation. On several occasions, a quorum was not present when the Committee was prepared to adopt a recommendation, and the Committee Chair took an active role in polling Committee members by telephone and fax to obtain their “votes” in preparation for presentation of Committee recommendations to the Council.

The meetings were facilitated by the Committee Chair. At the end of each meeting, the main topics for the next meeting were established, and the agenda was discussed by some combination of the Committee Chair, the AIDS Office staff to the Committee, and the technical support consultant.

III. KEY CONSIDERATIONS FOR RESOURCE ALLOCATION

This section discusses each of the key considerations of the 1996 resource allocation recommendations. The recommendations as approved by the HPPC are presented in Attachment 1 at the end of this chapter.

Elements of the Request for Proposals

Request for Proposals (RFP) by Population or Intervention

One of the first considerations for developing the RFP was its basic structure. Should the RFP be structured by interventions or populations? If interventions were chosen as the focus of the RFP, agencies would apply to provide one or more of the interventions to their target populations. If populations were chosen as the focus of the RFP, agencies would apply to provide one or more behavioral risk groups with whichever intervention(s) were most suitable. The Committee recommended that the RFP focus on behavioral risk groups for two principal reasons: 1) less is known about the effectiveness of interventions for specific behavioral risk populations² than is known about the level of risk faced by specific behavioral risk populations (as presented in Chapter 5 - Priority-Setting Criteria); and 2) the Council wanted to encourage providers to continue the development of new, innovative approaches to reaching target groups with effective HIV prevention strategies, and did not want to constrain this development through the RFP.

² See Chapter 4 - Strategies and Interventions, for information about effectiveness of interventions.

Number of Behavioral Risk Groups

A key consideration for the RFP was the number of behavioral risk groups that would be included. The Priority-Setting Matrix (shown in Chapter 5 - Priority-Setting Criteria) was a focal point for this discussion. A portion of that matrix is presented in Exhibit 6.1, below, for reference during this discussion. As can be seen in the Phase II Score of Exhibit 6.1, there are several reasonable breaking points: population group 1 (above 1,000 points); population groups 1-4 (above 300 points); population groups 1-7 (above 100 points); and all 12 population groups. The HPPC recommended that all 12 behavioral risk populations be included in the RFP; however, logical rationales were made for each option, and these are summarized below.

Exhibit 6.1
Priority Ranking of Behavioral Risk Populations

Behavioral Risk Population	Phase II Score	Rank
M; MTF (pre-op); FTM (post-op); - SM -IDU	1,476.04	1
M; MTF (pre-op); FTM (post-op) - SM/F-IDU	519.27	2
M; MTF (pre-op); FTM (post-op) - SM	347.82	3
M; MTF (pre--op); FTM (post-op) - SM/F	307.97	4
F; FTM (pre-op); MTF (post-op) - SM-IDU	199.50	5
M; MTF (pre-op); FTM (post-op)-SF-IDU	181.17	6
F; FTM (pre-op); MTF (post-op) - SF/M-IDU	100.26	7
F; FTM (pre-op); MTF (post-op) - SF-IDU	24.75	8
F; FTM (pre-op); MTF (post-op) - SF/M	6.09	9
F; FTM (pre-op); MTF (post-op) - SM	2.14	10
M; MTF (pre-op) FTM (post-op) -SF	0.61	11
F; FTM (pre-op); MTF (post-op) - SF	0.21	12

Considerations for the Number of Behavioral Risk Populations to be in the RFP

Population group 1: With a risk score almost three times higher than the next population group, MSM-IDU (including transgender MSM-IDU) are at significantly greater risk for HIV and need a major effort to prevent decimation of the population. On the other hand, using all or almost all of San Francisco's HIV prevention resources on only one group would have enormous political repercussions and would not be in the best interests of the public health in general and preventing the further spread of the virus among those in other groups in particular.

Population groups 1 - 4: The priority-setting criteria developed in the first two years of planning specify that the HPPC should explore ways to lower numbers of new infections through the careful distribution of limited resources. Since the MSM cluster (behavioral risk populations 1, 2, 3, and 4) constitutes the bulk of infections and risk, the bulk of

prevention funds should be used on efforts to prevent further infections within these groups. The set-aside activities (see discussion later in this section) could ensure HIV prevention for lower-ranked behavioral groups. Good public health indicates the necessity to provide prevention funding to the groups with the majority of seroconversions.

Population groups 1 - 7 or 1 - 8: Providing funding for the top seven or eight population groups addresses similar concerns expressed above for population groups 1-4, but additionally provides funding for the groups of women at highest risk. Furthermore, including population groups 1-8 in the RFP would enable providers to target all IDU populations in the City, rather than excluding some.

Population groups 1-12: All people who have unprotected sex or use injection drugs without clean drug paraphernalia are at risk for HIV in San Francisco due to the extremely high prevalence of the disease in San Francisco. The Priority-Setting Matrix models the risk for behavioral risk groups, but within each of these behavioral risk groups are segments which may be at higher or lower levels of risk. For example, there may be low-risk groups within the MSM cluster or high-risk segments within the lower-ranked groups. A finer level of discernment is needed in resource allocation than the behavioral risk population structure allows.

Risk Score

To achieve a finer discernment in level of risk within the behavioral risk populations while maintaining the basic ranking order of the behavioral risk populations, the Council adopted a recommendation to establish a minimum risk score for proposals. This score is based on the estimated average frequency of behavior and the known or estimated HIV prevalence within the target population. Its elements are identical to the Phase II score in the Priority-Setting Matrix, except that the risk score does not include an element for population size which the matrix Phase II score contains. Proposals with risk scores below the minimum would not be considered for review. Proposals with risk scores meeting or exceeding the minimum would continue through the review process.

The purpose of the minimum risk score is to identify the highest-risk target populations within (or across) the behavioral risk populations. Target groups and behavioral risk populations are not identical. While the proposal requires providers to explicitly focus on behavior change and to identify the behavioral risk populations they intend to serve, the HPPC recognizes that providers often serve groups identified by other characteristics such as ethnicity, drug use, age, or geographic location. The target population may not have the same behavioral/prevalence risk score as the overall behavioral risk group. Some target populations comprise segments of several behavioral risk populations, such as commercial sex workers, who may be FSM-IDU, FSF/M-IDU, FSF/M, or FSM. The establishment of a minimum risk score enables the provider-level conception of a target population to be accommodated within a planning-level conception of behavioral risk groups. To avoid conflict of interest on the part of Council members whose agencies would apply for funding, the AIDS Office set the minimum risk score.

Since the Council recommended that the RFP encompass all 12 behavioral risk populations, there was a concern that many agencies would submit proposals to serve very low risk populations, thus overwhelming, then most likely delaying, the review process. The minimum risk score not only enables reviewers to identify proposals serving high-risk groups, but also enables providers to avoid the time-consuming task of writing a proposal that has no chance of being funded because it targets a low-risk group.

Provider-supplied Data

With the establishment of a minimum risk score came the recognition that applicants for the RFP might need to provide behavioral risk estimates for their target group. While the Prevention Plan contains a great deal of information in the Epidemiological Profile and the Priority-Setting Criteria chapter, this information generally focuses on behavioral risk populations. Therefore, while providers are encouraged to use behavioral frequency and HIV prevalence estimates from the Prevention Plan, a mechanism was needed to ascertain the validity of provider-supplied information about the frequency of risk behavior or seroprevalence of the applicant's proposed target population.

The Epidemiology and Research Committee developed recommendations for future prevalence studies (see Chapter 3), but even if all of these were funded, gaps in knowledge would remain. Similarly, gaps in knowledge exist about the frequency of risk behaviors among the many diverse target populations in San Francisco, even though the City is one of the most studied in the world for HIV. In the future, the strategic evaluation, especially the required risk assessments conducted by prevention providers will aid greatly in forming estimated risk behavior scores (see Chapter 9 - Strategic Evaluation).

Until these risk assessments are in place, the need for a process to validate provider-supplied risk scores remains. After interviewing a number of researchers and providers about the standards for evaluating provider-supplied data, the Committee recommended (and the Council adopted) a method of proposal review by a panel of experts who would assess the risk score presented in each proposal according to standards outlined in Attachment 1 at the end of this chapter. Essentially, these recommendations encourage providers to use information from the Plan to the degree possible, and to conduct literature reviews or collect primary data from the target group when necessary.

Other RFP Criteria Based on the Prevention Plan

In addition to the minimum risk score, other criteria were developed for the review of proposals which met the minimum risk score. Several of these criteria are uniform throughout the Department of Public Health, such as organizational history and budget, and the Council did not alter them. It did, however, establish additional criteria based on elements of the Prevention Plan. It is through the RFP that core elements of the Prevention Plan are implemented, and the Resource Allocation/Resource Inventory recommendations tied into the RFP as many of the elements as practical. Recommended criteria for review of proposals include:

- A description of the co-factors present in the applicant's target group (from the Priority-Setting Criteria Committee);
- A description of the behavior theory supporting the proposed intervention (from the Strategies and Interventions Committee);
- How the intervention addresses the co-factors (an integration of both Priority-Setting Criteria Committee and Strategies and Intervention Committee);
- How the intervention will result in behavioral change (from the Year 1 Planning Council);
- How the intervention meets guidelines (established in the Strategies and Interventions Chapter);
- Intention of the applicant to participate in the city-wide evaluation (from the Evaluation/Technical Assistance Committee);
- Demonstration of coordination with other providers serving the same populations and linkages of clients to other needed services (from the Linkages Committee); and
- Description of the collaboration, if one is proposed, using the essential elements of collaboration (from the Linkages Committee).

Funding for Activity-based Prevention (Set-Asides)

The second area that the Resource Allocation/Resource Inventory Committee focused on was the issue of set-asides. A set-aside is an amount of money dedicated to a prevention activity. Set-asides may be sole-sourced (offered to a specific single provider) or put out for competitive bid. Most of the funds issued by the AIDS Office for HIV prevention were to be included in a competitive bid process using the criteria described above. However, a key consideration was whether to fund certain activities in a separate process, called set-asides for prevention activities. There were questions of 1) whether to set aside funds for certain activities; 2) if so, which activities; 3) whether the set-aside funds should be sole-sourced (for example to the existing provider) or competitively bid; and 4) whether the funding levels for each set-aside activity should be increased, decreased, or maintained. The discussion of set-aside funding was complex and required many Committee meetings and several Council meetings to resolve. A summary of the primary issues related to each of the questions is presented below.

Whether to set aside funds for certain activities

One opinion held that setting aside funds for programs is an appropriate action. The bidding process consumes staff resources, and should only be done if it serves a specific purpose. Furthermore, the bidding process will not in itself ensure that the provider winning the contract will meet HPPC expectations, and for some activities compliance with the Plan would better be achieved through contract negotiation with the existing provider. This opinion held that if a program can only be run by the Department of Public Health, it would make a good candidate for a set-aside activity.

Another opinion held that each set aside has to be justified. Set-asides and/or sole sources detract from the competitive spirit of the RFP and contradict the intent of the planning

process which is to look afresh at all programs by putting them out for bid. Set-asides are seen as giving preferential treatment to Department of Public Health Programs and certain CBOs and are inconsistent with the priority-setting model of funding by behavioral risk group.

Through discussion, it was established that the general intent is to put as much as possible out for bid, but set-aside funding approaches make sense, if they can be justified. Certain prevention activities are needed and desired but do not fit into a funding strategy based on behavioral risk populations. The programs considered for set-aside funding are described below, along with a summary of the justification for set-aside funding and the Resource Allocation/ Resource Inventory Committee's and HPPC's recommendation.

Activities Considered for Set-Aside Funding

Through discussion several criteria emerged that aided Committee members in recommending certain activities for set-aside funding. These criteria are:

- the service is valuable and necessary;
- the program is unique;
- the population served is unique;
- unique legal or policy circumstances warrant a set-aside.

While the above-stated criteria aided and focused the discussion, the recommendations for set-aside activities evolved over several months of discussion between the Committee and the Council. When the Committee first presented recommendations for activities that should be funded through set-asides, the Council roundly disapproved the recommendation. The Committee Chair made inquiries about the nature of the concern. Asking the Council to decide about set-asides before presenting the recommendations about criteria for the RFP was akin to putting the cart before the horse. HPPC members believed that the main thrust of funding should be through the open-bid process, and that few, if any, programs should be set aside. The issue of set-asides was withdrawn until the recommendations about the RFP were developed, presented, and voted upon. Then, the HPPC voted on the set-asides and removed only one of the Committee's recommendations for set-aside activities—venue-based outreach.

The Council recommended that set-asides be made for the following prevention activities:

- Needle exchange;
- General education (inc. hotline);
- School-based populations;
- Training (CBO);
- Incarcerated adults;
- Incarcerated youth; and
- Anonymous and confidential HIV counseling and testing.

The Council recommended that no funds be set aside for a street outreach collaboration.

Sole Sourcing and Funding Levels of Set-aside Activities

Initially, the tasks of the Resource Allocation/Resource Inventory Committee included forming recommendations to the Council about which of the set-aside activities should be sole-sourced (versus put out for bid) and whether the funding levels for these activities should change. The committee presented recommendations on the sole sourcing of set-aside activities which were not adopted by the Council. The majority of the HPPC members agreed with the concept of set-aside funding for select activities; however, few thought it appropriate to make recommendations about the bidding of particular programs. Some members believe that they do not have sufficient information to evaluate the current provider in order to decide whether that provider should continue. Most members object to making bidding/sole-sourcing recommendations, regardless of the information known, because “dollars and cents” decisions are not part of Council responsibility, whether competitive bid or sole-sourced. In forming recommendations about sole sources, the HPPC essentially would be making funding decisions specific to agencies or programs, which would violate the Council’s role as policy-maker.

The Committee Chair called a special meeting in May to gain clarity about the Council’s role in determining whether to sole-source or put out for bid the set-aside programs. The Director of the AIDS Office, Chief of Health Services and Prevention Branch, Chief of HIV Prevention Planning, Policy and Health Education Unit (and DPH Co-Chair), the Community Co-Chair, and Chair of the Resource Allocation/ Resource Inventory Committee met. After discussion, they agreed that rather than ask the Council to vote on whether to sole-source and whether to increase, decrease, or maintain funding for set-aside activities, the AIDS Office would receive input (but not binding recommendations passed by a majority) on these issues. The discussion would be recorded and provided to the AIDS Office via minutes and a special summary report. The decision on sole-sourcing would be made by the AIDS Office, based on input from the Council. This strategy removed from the Council the necessity of making a formal recommendation about specific programs for which there could be a conflict of interest, yet gave the AIDS Office guidance in making their decision. This is consistent with the CDC Guidelines on participatory planning.

This policy clarification was announced to the Council, and a method was put into place to receive Council input into bidding and funding levels for the set-aside programs. Responses by the Council suggested that the needle exchange program should be sole-sourced and the other programs operated by CBOs should be put out for bid. Opinion was fairly evenly divided about whether each of the set-aside programs operated by the Department of Public Health should be put out to bid. Large increases were generally suggested for every program (except confidential and anonymous counseling and testing), with comments such as, “We need more money for *all* prevention programs,” and “What else is there to do [but recommend increased funding]?” A few members suggested decreased funding for confidential and anonymous testing.

IV. SUMMARY OF RECOMMENDATIONS

The key recommendations of the Resource Allocation/Resource Inventory Committee adopted by the HIV Prevention Planning Council (HPPC) are:

- The AIDS Office shall issue an RFP structured by behavioral risk population to which applicants may apply to serve one or more of the 12 behavioral risk populations established by the HPPC;
- The RFP states a minimum behavioral risk score that is a combination of risk behaviors and seroprevalence. This score is established by the AIDS Office with input from the Resource Allocation/Resource Inventory Committee. Proposals scoring less than the minimum number of points will not be reviewed. Applicants are encouraged to supply their own estimates, if information about their target population is not included in the Prevention Plan. A data review panel will review provider-supplied estimates for credibility.
- Applications must also discuss other issues in the plan, such as behavior theory, the proposed intervention, co-factors of the target population, and coordination with other providers.

Separately from the targeted prevention RFP, monies shall be set aside for a needle exchange program; general education (including a hotline); school-based populations, provider training; incarcerated youth and adults; and anonymous and confidential HIV antibody counseling and testing.

Evaluation of the RFP Process

Many of the specific concerns or questions about the effects of the RFP will not be known until the contracts are put into place and an assessment of gaps can occur. A task of the Resource Allocation/Resource Inventory Committee for 1996 was to evaluate the RFP process and to recommend changes for the future. Because the RFP was issued late, the Committee had insufficient time to adequately evaluate the process, and this assessment will occur in 1997. The assessment will include an examination and possible revision of the priority-setting model, since concerns were raised that the model as it exists does not meet the intent of present Council members (for example, prevalence estimates overshadow estimates of risk behavior). Until a thorough assessment of the RFP process has been completed, uncertainty about the effects of the RFP in meeting the priorities of the 1995 HIV Prevention Plan will remain.

V. COUNCIL CONCERNS REGARDING IMPLEMENTATION OF RECOMMENDATIONS

The AIDS Office issued two requests for proposals (RFPs), one for targeted prevention of behavioral risk populations in June, and the other for prevention activities in August. The behavior-targeted prevention RFP had different requirements for those applying to serve behavioral risk populations (BRP) 1 through 7 and 8 through 12: providers applying to serve groups in BRP 1 - 7 were not required to provide an estimated risk score, while those applying to serve groups in BRP 8-12 were required to supply a risk score. A separate proposal was required from providers applying to serve groups in both categories. In the second RFP, venue-

based outreach (street outreach) was included, against Council recommendation. Further, the hotline was listed as a separate activity (the Council recommended it be include as a possible method for general education). These actions led to many questions and concerns on the part of Council members.

Discussion of the RFP process occurred at the annual HPPC membership retreat, Co-Chair meetings, committee meetings, and Steering Committee meetings. A significant portion of one Council meeting, and smaller portions of several other Council meetings were used to discuss the RFP process, communication problems between the Council and the AIDS Office, and actions to improve the planning and implementation process.

The concerns expressed by the Council dealt not only with the ways in which the AIDS Office did not follow by Council recommendations, but also with concerns about the ways in which the priority-setting model disfavors groups in the lower-ranked behavioral risk populations. Of particular concern for some Council members is women who do not inject drugs but engage in high risk sexual behaviors. Specific issues expressed by Council members are printed below, from notes of an HPPC meeting.

Concerns about the Priority-Setting Model (1995 work)

- The 12 BRP have limitations. They do not include certain groups, and do not take into account differences in risk between subgroups within a BRP.
- The prevalence rates in the ranking process overpower the other variables.

Concerns about RFP Process as Recommended by Committee/HPPC

- The point system unfairly penalizes certain groups—those that:
 - 1) have not been sufficiently researched;
 - 2) have not been impacted heavily in the past but are likely to be in the future; and
 - 3) have hidden HIV/AIDS rates because of low or delayed testing and treatment.
- The point system, by only funding groups above 100, took away the judgment of the AIDS Office to look at currently needed programs within all risk groups.

Concerns about RFP Process as Implemented by AIDS Office

- The separation of BRPs 1-7 and 8-12 may require two proposals from some providers, which gives an advantage to agencies with a higher ability to produce multiple proposals.
- The RFP clearly favors BRPs 1-7, even though some groups within these BRPs may be at lower risk for HIV than some groups within BRP 8-12.
- No set-asides for venue-based outreach were recommended by the HPPC, but the August Activities-Based RFP included venue-based individual outreach .
- General Education and the HIV/AIDS Hotline have been separated despite the HPPC's recommendations to include both as one category, so that new approaches to information and referral could be proposed.

Concerns about the Management of the RFP Process

- Send the RFP out on time. It would be unacceptable for a CBO to miss the return deadline, and it is unacceptable for the AIDS Office to continually delay the release of the RFP.
- Eliminate the two-part RFP process. Having the second RFP come out after the first only caused stress for those CBOs that did not know whether they should apply for the first one or wait for the second one.
- The technical assistance at the Bidders Conference was not sufficient to enable providers to well understand how to develop a minimum score for their proposals.

The first two areas of concern—issues relating to the Council’s priority-setting and resource allocation recommendations—will be addressed in 1997 as a committee of the HPPC undertakes the task to assess the RFP process. This task will include an evaluation of the priority-setting model and the recommendations approved by the 1996 HPPC (contained in Attachments 1 and 2 of this chapter). Particularly noted during the assessment will be issues of the weight of prevalence in the priority-setting model, the construction and use of the point system, and the ways in which some high-risk target populations (for example, crack users or commercial sex workers) are not easily taken into account within the 12 behavioral risk populations. This assessment may result in recommendations for revisions to the priority-setting model and/or resource allocation recommendations.

The assessment will examine and clarify issues related to the resource allocation process. While the HPPC members are proud of their accomplishments in 1996, an assessment is necessary since the effects of the priority-setting model and resource allocation process are increasingly becoming known as contracts resultant from the RFPs are being negotiated. While the assessment may result in a refinement of the model, it is not intended to disregard the work of the previous Councils. With membership term limits, new members join the HPPC each year. The membership that developed the priority-setting model is not identical to that which approved the resource allocation recommendations, nor to the membership which will conduct the assessment. Yet, despite the change in membership, it is critical to maintain continuity in understanding and support of previous year’s Council work, as the planning process evolves.

The Department of Public Health Co-Chair, the Chief of the Health Services and Prevention Branch, and the Director of the AIDS Office provided explanations of its decisions during several of the Council and committee meetings. In these discussion, the AIDS Office staff stated that communication about expected changes in the technical aspects of the RFP should have been more timely. Staff described several challenges they faces that were out of their control, as well as decisions that they perceived would violate the confidentiality of the RFP process (e.g., providing advance information to HPPC members, some of whom represent potential applicants).

Releasing one or more RFPs requires a substantial mobilization of programmatic, fiscal, and administrative resources from the AIDS Office. While the preparation of the RFP is time-intensive, the AIDS Office has learned from this process that if a second RFP is needed, it is important to release it prior to the application deadline of the first. (While the concern was expressed as a delay, the more important issue may be an overlap in due dates with two RFPs.) This, and other, lessons learned from the first experience with implementing a community-participatory planning process will be beneficial in future years. The AIDS Office is examining methods for streamlining the internal process to hasten the time required in releasing an RFP. Additionally, the AIDS Office is working with the HPPC to develop methods for improved communication, participation in the proposal review process, and clarification of the separate and joint roles and responsibilities of the HPPC and AIDS Office.

The AIDS Office responded to HPPC criticisms of the process by stating that the decisions it made which varied from recommendations made by the Council were made in good faith, and were not intended to undermine the spirit of community planning. The intention was to simplify the RFP process, provide a fair and equitable review of proposals, and avoid duplication or gaps in services (e.g., the AIDS Office's decision to maintain city-wide street outreach as a set aside).

VI. CONCLUSION

The fundamental questions brought up by the differences between HPPC recommendations and AIDS Office actions were: **What are the separate and shared roles and responsibilities for the AIDS Office and the HIV Prevention Planning Council? How can communication between the HPPC and AIDS Office be improved? What methods can be used to resolve conflicts?** Answering these questions is no simple task. And it is the task of no one committee or group. Discussion began in the final months of 1996 about methods to improve the process of the collaboration between the HPPC and AIDS Office. The Steering Committee and Co-Chairs have begun to draft a document called "Roles and Responsibilities" that discusses the separate and joint responsibilities for planning between the HPPC and AIDS Office. The document includes controversial topics such as resource allocation, communication, mutual accountability, and conflict resolution, as well as straightforward topics such as selecting members, running Council meetings, and conducting planning activities (needs assessments, etc.). It is hoped that, through the drafting and adopting of this document, answers to the most difficult questions about the collaboration will be agreed upon.

Forming the recommendations was not easy, nor were the discussions about the AIDS Office's implementation of the recommendations. Balancing public health, planning, and politics; allocating limited resources; the need to maintain community-based organizations; and achieving consensus from a diversity of views are only a few of the difficulties with resource allocation. The concerns brought up by the differences between the HPPC recommendations and AIDS Office actions exemplifies the tensions that may be inherent in implementing community planning priorities where a redistribution of prevention funds occurs. Throughout

the nation, HIV prevention planning groups find tasks related to resource allocation to be, at best, challenging. By far the most politicized activity of a planning group is any discussion involving the distribution and use of dollars.

The Resource Allocation/Resource Inventory Committee and the HPPC are proud that they were able to form recommendations for resource allocation. These recommendations, while they may need some refinement in the future, were successful at incorporating all of the elements of the three-year planning process into an implementation phase. The strength of the resource allocation process is that it builds upon the HPPC's previous work. In the upcoming year, there will be time to reflect, incorporate the lessons learned this year, and refine the process. One of the valuable effects of developing the resource allocation process has been to learn more about how the HPPC and AIDS Office view their separate and joint roles, and the opportunity to develop these views into an explicit agreement of responsibilities and mutual accountability.

ATTACHMENT 1: RESOURCE ALLOCATION RECOMMENDATIONS

This attachment presents the recommendations of the Resource Allocation/Resource Inventory Committee adopted by the HPPC exactly as the Council approved them. The recommendations cover three areas: 1) guidelines for the Request for Proposals; 2) criteria for reviewing applicants' prevalence and risk behavior data; and 3) recommendations regarding set-aside activities.

Guidelines for the Request for Proposals (RFP)

The resource allocation process is based on the intent to fund prevention for populations at highest risk while making provisions for general education throughout the City. The amount of funds available for targeted prevention includes the total funds from the Centers for Disease Control and Prevention (CDC), California Department of Health Services Office of AIDS, and City and County of San Francisco General Fund, less amounts for AIDS Office administration and set-asides for specific purposes.

The HPPC recommended criteria to guide the RFP process, presented below:

1. Applicants may submit an application to serve target populations in any of the 12 behavioral risk populations.
2. Applicants are expected to include in the applications estimates of the frequency of risk behavior and HIV prevalence of their target population, using information supplied in the Epidemiology or Priority-Setting Chapters. These estimates are used to calculate a risk score. $\text{Risk Score} = \text{Behavior Score} \times \text{HIV Prevalence Estimate}$. Behavior Score = the sum of the average annual frequency of each risk behavior multiplied by its relative risk. (Relative risk has been established in Chapter 5 - Priority-Setting Criteria.)
3. Any proposals scoring less than a minimum number of points using this formula will not be reviewed. The minimum number of points necessary for a proposal to advance to review stage will be stated in the RFP and will be determined by the AIDS Office based on input from the Resource Allocation Committee.
4. If behavior frequency and/or HIV prevalence estimates are not provided in the Epidemiology or Priority-Setting chapters of the San Francisco HIV Prevention Plan for the agency's specific target population, providers can supply these estimates from other sources, but must document the validity of the estimates. Applicants using behavior frequency or seroprevalence data that are not in the Epidemiology or Priority-Setting Chapters should submit supportive documentation describing the source and methods used to develop the estimates. A Data Review Panel will be convened by the AIDS Office. This panel will review the behavior and HIV prevalence estimates contained in all applications. The Data Review Panel will determine whether the information used to make the estimate, and the estimate itself are acceptable. The Data Review Panel may reject the application or adjust the estimate if the source of information or methods used

to develop the estimate is deemed to be invalid. See criteria listed below for further information.

5. Proposals with a Risk Score of the stated minimum number of points will be reviewed. In addition to the Risk Score and DPH-established criteria, criteria based on the Priority-Setting and Strategies and Interventions chapters will be used, including the following:
 - a) Availability of other funds to serve the population;
 - b) Description of the most significant co-factors present in the target population;
 - c) Proposed intervention(s) and reasons for selecting that intervention:
 1. Behavior theory supporting the intervention;³
 2. How the intervention addresses the co-factors;⁴
 3. How the intervention will result in behavior change;
 4. How the intervention meets the guidelines established in Chapter 4 - Strategies and Interventions, specifically:
 - Required Standards for Service Provision;
 - Expected Outcomes;
 - a) Intention of the applicant to participate in the city-wide evaluation and collection of information about standardized variables⁵;
 - e) Demonstration of coordination with other prevention providers serving the same population and linkages of clients to other needed services⁶; and
 - f) If a collaboration is proposed, applicants must describe the ways in which the projects will work together, using the essential elements of collaborations approved by the HPPC⁷.
6. There may be insufficient monies to fund all eligible proposals, and proposals with highest behavior/seroprevalence and overall scores will be funded first. The AIDS Office may specify a minimum number of proposals that they expect to fund with the total amount available. Three principles are recommended for the selection of proposals:
 - 1) Avoid duplication of services;
 - 2) Prevent gaps in services; and
 - 3) Encourage complementary services (which may be provided simultaneously to a given population).

It must be stressed that the intent of this process is to fund prevention for target populations at highest risk. For the most part, these populations fall into the highest ranked behavioral groups, but there may be populations at high risk and with high prevalence in the lower-ranked behavioral groups, and these populations would be eligible for funding.

³ See Chapter 5

⁴ See Chapter 3

⁵ See Chapter 9

⁶ See Chapter 8

⁷ See Chapter 8

Criteria for Reviewing Applicants' Prevalence and Risk Behavior Data

The Council next developed specific criteria for reviewing proposals containing provider-supplied prevalence or risk behavior data. Applicants are expected to include in the applications estimates of the frequency of risk behavior and HIV prevalence of their target population. These estimates are used to calculate a risk score. If behavior frequency and/or HIV prevalence estimates are not provided in the Epidemiology or Priority-Setting chapters for their specific target population, applicants can supply these estimates from other sources, such as a literature review or primary data collection. A Data Review Panel will be convened by the AO to review the estimates in all applications.

Definition: Literature Review

A literature review consists of finding relevant published and unpublished articles and reports, reviewing these articles and reports for information about seroprevalence and risk behaviors, and using them to draw conclusions about seroprevalence and/or risk behavior for the applicant's target population.

Submit in the application: your conclusions (i.e., estimation of seroprevalence and/or frequency of risk behaviors) based on the literature review; a bibliography of the articles used to draw this conclusion, a summary of the methods used to conduct each study (particularly selection and number of participants), and a copy of any of any articles that are not published. The studies selected should use generally accepted research standards, such as representatives of participants and sample size. Articles published in peer reviewed journals (academic journals) indicate that the study used generally acceptable standards.

Definition: Primary Data Collection

Primary data consist of information collected from the applicant's actual target population. These usually consist of oral or written surveys conducted by the applicant, an agent of the applicant, or, in some cases, researchers who share their findings with the applicant.

Submit in the application: your conclusions (i.e., estimation of the frequency of risk behaviors) based on the primary data; a description of the methods used to collect data (particularly selection and number of participants, refusal rate, and duration of the data collection), a sample of the questionnaire or data collection tool instrument, and a summary of the findings of the data collection that lead you to draw your conclusions about the frequency of risk behaviors.

HIV Prevalence Estimates

Applicants are encouraged to use prevalence estimates provided in the Epidemiological Profile of the San Francisco HIV Prevention Plan. To assist applicants to submit applications, the Seroepidemiology and Surveillance Branch of the AIDS Office may develop HIV prevalence

estimates for other select populations. Applicants are encouraged to use these prevalence estimates, if prevalence estimates are not provided in the San Francisco HIV Prevention Plan.

If prevalence estimates for the applicant's target population are not included in the Epidemiological Profile or in the list of prevalence estimates for select populations developed by the AO, applicants may supply an HIV prevalence estimate for their target population. The Data Review Panel will determine whether the information used to make the estimate and the estimate itself is acceptable. The Data Review Panel may reject the application or adjust the estimate if the source of information or methods used to develop the estimate are deemed to be invalid.

HIV Prevalence Based on Literature Review

- Applicants may use a literature review to develop HIV prevalence estimates for their target population, if prevalence estimates are not contained in the San Francisco HIV Prevention Plan or on the list of Prevalence Estimates for Select Populations.
- If using a literature review, applicants should describe how the studies' populations are comparable to the applicant's target population in terms of age, gender, ethnicity/culture, sexual orientation, drug use, socioeconomic status, and other relevant factors. The applicant should describe the ways in which the studied populations are different from the target population and how the applicant took these differences into account in estimating HIV prevalence of the target population.
- Prevalence studies conducted in or near San Francisco of the target population will be deemed to have more credibility than studies conducted outside of San Francisco. National or multi-city samples are better than single-city samples, especially if San Francisco was one of the sites.

HIV Prevalence Based on Primary Data Collection

- Prevalence studies should be conducted according to generally acceptable standards, including sampling methods. It is unlikely that any applicants will have conducted seroprevalence studies.

Risk Behavior Frequency Estimate

Applicants are encouraged to use risk behavior frequency estimates provided in the San Francisco HIV Prevention Plan. In the absence of an estimate for the applicant's target population, applicants may supply a risk behavior frequency estimate for their target population. (Appendices to the chapter contains methods used by the Priority Setting Committee of the Council to develop these estimates, and a bibliography of select articles and reports that describe frequency of behaviors.) The Data Review Panel will determine whether the information used to derive the Behavior Score and the Behavior Score itself is acceptable. The Data Review Panel may reject the application or adjust the Behavior Score if the source of information or methods used to develop the estimate are deemed to be invalid.

Risk Behavior Frequency Based on Literature Review

- Applicants may use a literature review to form estimates of the frequency of risk behavior (used to derive the Behavior Score) for their target population, if estimates are not contained in the San Francisco HIV Prevention Plan.
- Applicants using a literature review to form risk behavior frequency estimates for their target population should describe how the studies' populations are comparable to the applicant's target population in terms of age, gender, ethnicity/culture, sexual orientation, drug use, socioeconomic status, and other relevant factors. The applicant should describe the ways in which the studied populations differ from the target population and how the applicant took these differences into account in estimating the frequency of risk behaviors of the target population.
- Studies conducted in or near San Francisco of the target population will be deemed to have more credibility than studies conducted outside of San Francisco, assuming the studies use accepted methods. In the absence of studies conducted in or near San Francisco, national (or multi-city) samples are better than single-city samples, especially if San Francisco was one of the sites.

Risk Behavior Frequency Based on Primary Data Collection (This includes program specific information or information collected during the course of prevention program activities.)

- Data collection tools should ask about the frequency of at least the highest-risk behaviors (sharing unsterile needles, unprotected anal intercourse, and unprotected vaginal intercourse).
- All data collection tools must be quantifiable and systematic (e.g., asking the same questions of all persons).
- Risk assessment data collection which uses representative methods of sample selection has more credibility than data using convenience samples. If using convenience samples, applicants should describe the methods used to make the sample as representative of the total target population as possible.

Overall Considerations

- A strong literature review will be held more credible than a data collection tool using weak methods. A data collection tool using strong methods will be deemed more credible than a weak literature review.
- Seroprevalence and/or risk behavior frequency estimates developed by applicants based on literature review and/or primary data collection will be compared to estimates for somewhat similar populations for which information exists in the San Francisco HIV

Prevention Plan. If the applicant estimates vary greatly from what is expected, the applicant's estimates will be held less credible unless the applicant's methods for developing these estimates are persuasive.

Recommendations Regarding Set-Aside Activities

This section presents recommendations adopted by the Council for prevention activities that should receive set-aside funds before the remainder of funds are issued in an RFP. Most of the funds will be allocated to targeted prevention activities using the process described above. However, select activities do not easily fit into this process yet are deemed important. Funds for these activities will be set aside before determining the amount available for targeted prevention. All prevention activities funded through the set-asides will be held to the same standards as those responding to the general RFPs.

A set-aside is an amount of funds that will be dedicated to a specific prevention activity. Activities with set-aside funds may be put out to bid in a competitive process or may be sole-sourced to a single entity. The decision of sole sourcing will be made by the AO, based on input from the Council. The Committee developed several criteria to aid members in deciding whether there should be set-asides for specific programs. These criteria are 1) the service is valuable and necessary; 2) the program is unique; 3) the population served is unique; and 4) there are unique legal or policy circumstances that warrant a set-aside.

The Council recommended that set-asides be made for the following activities:

- Needle exchange;
- General education (inc. hotline);
- School-based populations;
- Training (CBO);
- Incarcerated adults;
- Incarcerated youth; and
- Anonymous and confidential HIV counseling and testing (CBO, family health clinics, City STD clinic, hospital-based testing).

ATTACHMENT 2 ACTIVITIES CONSIDERED FOR SET-ASIDE FUNDING

Needle exchange: Needle exchange operates in San Francisco through its indemnification by the Mayor who cites a state of emergency in the City. It provides one-for-one exchange of used needles/syringes for new ones, and exchanged more than 900,000 syringes for 31,000 (probably duplicated) clients at 11 sites in the last six months of 1995.

Needle exchange is one of the few interventions with extensive evaluation, both locally and nationally, that shows its effectiveness in reducing new HIV infections. It is a concrete example of a program that is unlikely to have competition in the bidding process, due to its illegal nature and the long, difficult process required to obtain indemnification. **Recommended by Committee and Council for set-aside funding.**

Incarcerated youth: Through a special arrangement that allows Department of Public Health staff to have an office at the Youth Guidance Center and Log Cabin Ranch (located in La Honda, CA), incarcerated youth have access to HIV prevention and education. These include HIV/STD education and voluntary, confidential HIV antibody testing. More than 1,100 incarcerated youth received prevention education and 60 received testing through this program in 1995.

The adolescent incarcerated population is at higher risk than the general population of adolescents in the City. The incarceration setting is an appropriate venue for prevention education. The special arrangement granted to the Department of Public Health for access to the detained youth might not be offered to another provider. **Recommended by Committee and Council for set-aside funding.**

Incarcerated adults: Through a special arrangement that allows Department of Public Health staff to have access to adults in the jail system, various HIV services are provided. These include HIV/STD education and voluntary confidential HIV antibody testing. More than 12,000 inmates received prevention education and more than 900 inmates received HIV testing in 1995 through this program.

Adult inmates in the San Francisco and San Bruno jails are at high risk for HIV; for example, it is estimated that 40% have a history of drug use and/or drug-related offenses. It required four years to establish the relationship with the Sheriff's Department to allow this access to inmates, and this arrangement might not be extended to another provider. **Recommended by Committee and Council for set-aside funding.**

School-based Programs: The school-based HIV curriculum is offered by a program of the Department of Public Health in four progressive sessions to youth in traditional middle and high schools, alternative, parochial and private schools. It includes teacher training as well. More than 5,000 high school and 1,000 middle school youth received this curriculum in 1995.

State law requires school-based HIV education, but does not mandate the quality or extent of that education. It is uncertain whether the school district could provide a high level of

this education without the DPH-funded activity. The intervention crosses all behavioral groups, reaching youth who are exploring sexuality and sexual behaviors. The Committee debated whether this needs to be a Department of Public Health Program, or whether a community-based organization could provide this service. **Recommended by the Committee and Council for set-aside funding.**

Confidential HIV Antibody Counseling and Testing: The Bureau of Children, Youth and Their Families provides Counseling, Testing, Referral, and Partner Notification (CTRPN) and health education/risk reduction in the five city-run health centers, the Balboa High School teen clinic, the Real Alternatives Program, and the Health Services Department of City College of San Francisco. (The AIDS Office funds only the CTRPN component.) The Department of Public Health offers HIV antibody counseling and testing at City Clinic (the STD clinic). Counseling and testing is also offered to patients at San Francisco General Hospital, several drug treatment centers and community sites. Over 13,000 individuals received this service in 1995.

The health clinics provide counseling and testing in a comprehensive clinic setting for little or no cost to the client. For many, this may be a singular opportunity for receiving these services. Confidential counseling and testing is an intervention that leads to behavioral change in some populations. It identifies persons at high risk with negative test results, and assists in the referral of persons with positive test results to more intensive interventions or care. However, because many people who use the service, particularly at the health clinics, are not at high risk for HIV, and because these services can be performed by a variety of providers, there is mixed opinion about setting aside funds for the services at the district health centers and San Francisco General Hospital, although there was strong concurrence for continuing the services at City Clinic as a set-aside. (An additional concern was with the funding levels for CTRPN since the CDC lifted the requirement of a specified percent of funding for this service.) **Recommended by the Committee and Council for set-aside funding.**

Anonymous HIV Antibody Counseling and Testing: Anonymous counseling and testing is provided at 7 sites throughout the City by a community-based organization. More than 9,000 individuals received this service in 1995.

Anonymous testing must be provided by State law. Furthermore, this intervention can lead to behavioral change in some populations, and, like confidential counseling and testing, it assists both persons at high risk with negative test results, and persons with positive results with referrals to more intensive interventions or care. **Recommended by the Committee and Council for set-aside funding.**

General Education: General education provides education and messages to the public in order to ease the unwarranted fear of casual contagion, increase the support for persons with HIV, and reach low-risk populations with prevention messages. Examples include media advertising, speakers' bureaus, basic training on HIV, and written materials. General education is not currently funded by the AIDS Office.

The Prevention Plan recommends some level of HIV prevention for all residents of San Francisco. General education is not an activity that fits well into the priority-setting approach of behavioral risk groups and risk scores, since the intent is to blanket the city with messages that include those at low risk. **Recommended by the Committee and Council for set-aside funding.**

Hotline: The anonymous telephone service for Northern California and San Francisco is open 12 hours per day and provides information on HIV/STD prevention, treatment, and related services and referrals. The AIDS Office funds only a portion of the San Francisco component. It responds to approximately 26,000 calls per year in English, Spanish, and Filipino dialects.

Many callers to the hotline are not at high risk for HIV. The hotline can be considered a general education approach, and as such could be placed within the general education set-aside activity. Opinion was divided about whether another provider could perform this service. The “infrastructure” of the Hotline is complex (training and supervision of volunteers, developing messages for common concerns, maintaining referrals), particularly for a multi-language hotline; however, there were concerns about the responsiveness of the current provider to the culturally-diverse needs of the San Francisco population. **Recommended by Committee and Council to be included as part of the General Education set-aside.**

Provider Training: Currently two agencies offer three-day CTRPN certification trainings, risk assessment and disclosure trainings, and two-day enhanced counselor trainings. One of the agencies also provides training sessions on cultural competence, basic HIV information, human sexuality, and substance abuse for prevention providers and other interested parties. These training sessions were provided to 1,600 providers in 1995.

The State Department of Health Services does not offer training of CTRPN providers that are not state-funded, so some type of centralized provider training is necessary in San Francisco. Prevention providers continue to need information and training sessions on ongoing and new topics. **Recommended by Committee and Council for set-aside funding.**

Street Outreach Collaboration: Since 1994, city-wide outreach services have been provided by the Street Outreach Services collaboration. Before the collaboration was formed, a great deal of client duplication occurred between agencies conducting street outreach in some neighborhoods, while other neighborhoods were not covered or not covered proportionate to need. The collaboration was created to coordinate efforts to provide coverage of neighborhoods and of target populations. Over 40,000 (duplicated) clients received brief street-based needs assessment, risk reduction counseling, referrals to services, and risk reduction supplies.

Street outreach is an important and needed intervention. However, opinion is mixed about the importance of providing this intervention through a collaboration with set-aside funding. One opinion is that the target population is not a unique one for HIV prevention activities, the intervention is not unique, and multiple providers are willing to perform the service. Therefore, it is not suitable for set-aside funding. Another opinion is that centralized collaboration is unique. It required great effort to establish the collaboration and the

collaboration well serves persons at risk in the City. If set-aside funding were not offered, the collaboration would collapse and outreach services may be performed unevenly in neighborhoods in which high-risk persons live or congregate. **The Committee recommended (by a slim margin) set-aside funding and the Council recommended no set-asides for this activity.**

ATTACHMENT 3: CDC APPLICATION LETTER OF CONCURRENCE; STATEMENT OF CONCERN; AND AIDS OFFICE RESPONSE

The CDC Application for funding includes a Letter of Concurrence from the HPPC. The letter is followed by a Statement of Concern. The relevant portion of these two letters is printed below, followed by the response that the AIDS Office sent with the Application.

Letter of Concurrence

The HIV Planning Council (HPPC), the designated HIV prevention community planning group for San Francisco, concurs with and strongly supports the enclosed request submitted by the AIDS Office of the San Francisco Department of Public Health for continued Cooperative Agreement funding from the CDC. The HPPC would like to note that this concurrence is based only on the decisions reflected in this application, as the second round of awards for FY 1997 has not yet been completed.

Council members, through their participation on the six Committees of the HPPC, have contributed significantly to the priorities, scope of work, and overall directions reflected in the Proposed Program Plan for FY 1997. The priorities contained within the Program Plan generally match the priorities agreed upon by the HPPC. (Please reference the Statement of Concern which follows this letter.)

Year 3 of the Community Planning Process, a year of implementation, has been difficult. However, both the AIDS Office and the HPPC are working together to improve a collaborative process which has otherwise been both productive and very successful.

Statement of Concerns

In addition to our letter in support of the enclosed Cooperative Agreement application, the San Francisco HIV Prevention Planning Council would like to note the following concerns.

First, we would like to acknowledge our intention to reassess and possibly revise the priority-setting model developed in the second year of planning.

Second, communication between the AIDS Office and the Council has been fraught with frustration and difficulty this year, and technical support or mediation is requested.

Finally, although the Council is generally in support of the enclosed application, there remain significant concerns voiced by the Council. These are primarily around the implementation of the priority-setting process through the Request for Proposals (RFP) process for FY 1997. Specifically:

- *The AIDS Office required that a separate proposal be written for Behavioral Risk Populations (BRP) 1 through 7 and 8 through 12 in RFP #015-96, the first of the two RFPs*

released during 1996. This requirement violated the intent of the Council's recommendations and put unfair burden on providers serving non-IDU women.

- *Venue-based individual outreach was established as a set-aside activity in RFP #016-96, the second RFP, against the Council's recommendation.*
- *The funds available to prevention providers were split between two RFPs which were issued at different times, placing an unfair burden on providers who were unsure which RFP to respond to.*
- *Training for providers on the calculation of the minimum score was inadequate.*
- *There may be gaps in service for the lower priority groups as a result of these implementation activities.*

AIDS Office Response

In response to the Statement of Concerns submitted by the San Francisco HIV Prevention Planning Council (HPPC), the AIDS Office of the San Francisco Department of Public Health (SFDPH) submits the following response.

During this, the third year of HIV Prevention Community Planning, the SFDPH as a full partner of the HPPC, embarked upon implementation of the recommendations contained in the 1995 HIV Prevention Plan (Plan) and its two addendum chapters: Priority-Setting and Strategies and Interventions.

It should be noted that in 1996, the HPPC membership was reconstituted due to the expiration of two-year term limits established under the bylaws in 1994. Two-thirds of the original members were replaced at the beginning of 1996; thus the HPPC charged with implementation of the Plan was not, in its entirety, the HPPC that established priorities for resource allocation. This, we believe, contributed to the frustration and disappointment expressed by the current HPPC when the competitive Requests for Proposals were released by the SFDPH AIDS Office.

Priority setting, as mandated by the CDC and embraced by the SFDPH in partnership with the HPPC of 1994-95, led to the ranking of behavioral risk populations. It was a certainty that some behavioral risk populations would not receive as much (or any) funding based on the overall goal of the HPPC: to eliminate new HIV infections in San Francisco. The HPPC of 1994/95 created this paradigm, and accepted that resources would by necessity, be allocated differently from the past in order to meet this goal. The HPPC of 1996 (some of whom were part of the priority-setting process) was made aware of this direction through orientations and trainings on the priority-setting model, and throughout the year. However, when the SFDPH AIDS Office fulfilled the HPPC obligation of establishing a minimum score to create a demarcation between high and low risk groups, the HPPC reacted as if they were unaware that some groups may not receive any funding.

We do not agree that our approach to the RFP process violated the implementation of the priority-setting process. We do agree that the interpretations of implementation of the minimum score were not communicated effectively between the HPPC and the AIDS Office. The

direction taken was made to facilitate a less cumbersome RFP process and to ensure a fair and equitable review of proposals for all behavioral risk populations.

Finally, it must be stated that the AIDS Office intends to fully implement the priorities in the Plan. We realize that our resources are finite and that there may be population groups that are not funded through our Office. We have demonstrated the commitment to allocate resources to the highest risk populations so as to meet the HPPC goal of eliminating new infections in San Francisco. Moreover, we are committed to leveraging our funding to as many BRPs as possible. We continually search for additional funding and together with the HPPC, attempt to identify other resources which target lower risk populations.

This year of implementations has realized the impact of the paradigm shift—from priority-setting based on traditional target populations—to behavioral risk. This change has evolved gradually until the release of RFPs. The AIDS Office has made many strides to keep the prevention provider community and the HPPC abreast of these changes through specialized trainings and provider updates.

We are committed to HIV Prevention Community Planning and are striving to improve the collaboration between our office and the HPPC. Efforts have already begun to define more clearly, the individual and joint roles and responsibilities of the HPPC and the AIDS Office. During 1997, the HPPC, together with the AIDS Office, will assess the models established during the first three years of community planning and evaluate the implementation that occurred during Year Three. We are confident that with open and timely communication, shared understanding and clear expectations, the AIDS Office and the HPPC will enjoy a positive partnership.

CHAPTER 7 - RESOURCE INVENTORY

The Resource Inventory is an overview of HIV Prevention Services funded during 1996 by the City and County of San Francisco Department of Public Health. Due to different funding cycles, it contains information for services funded through the Centers for Disease Control and Prevention (CDC) for the calendar year 1996 and services funded through the State of California Department of Health Services and the City and County General Fund for fiscal year 1996/97. Information in the exhibits was gathered from AIDS Office contracts and staff who are responsible for overseeing these contracts. The resource inventory contains exhibits which list HIV prevention by Agency (Exhibit 7.1), by Behavioral Risk Populations (Exhibit 7.2), by Intervention -Type (Exhibit 7.3) and by Training and Technical Assistance services (Exhibit 7.4). Following the Resource Inventory are recommendations developed by the Committee and adopted by the Council regarding the format of updated inventories in the future. For a discussion of the committee process, please refer to the section on Committee Operations in Chapter 6.

INTRODUCTION

To the extent possible, the Resource Inventory is structured by Behavioral Risk populations, in keeping with the multi - year approach of the HPPC to define groups by behavior. Several limitations exist that should be mentioned before any conclusions are drawn from this data. These limitations include:

Behavioral Risk Populations - As the paradigm shift from target groups (defined by providers based on characteristics such as sexual identity, age, ethnicity, and other co-variates or co-factors) to behavioral risk populations (BRP) (defined by the HPPC based on behaviors) is not yet complete, providers were not required to develop interventions targeting the specific behavioral risk of individuals or groups during the time period shown in this resource inventory. Therefore, the groups targeted for these services cannot easily fit into the behavioral risk population categories. For example, some providers developed interventions according to a target group that crosses several behavioral risk populations, such as youth. In this case, the provider is listed as providing services to several behavioral risk populations; although it is unlikely that it reached equal numbers of clients in each BRP. It is not possible to determine the extent to which specific behavioral risk populations were reached by these providers. As of January, 1997, service providers will be required to target interventions according to the HPPC-defined behavioral risk populations (shown in the attached key), and information contained in the updated resource inventory will more accurately reflect who is receiving services.

Intervention Type - A single provider may be implementing several types of interventions in their target population. It is not possible at this time to delineate the amount of funding that each intervention receives, due to the manner in which contracts were executed. Beginning in 1997, contracts with service providers will be written so that it is possible to ascertain how much money is allocated to each intervention type that the agency is conducting.

Demographics - Specific demographic information is not available for any of the exhibits, as no programs completed their funding contracts at the time this Plan was issued. It is reasonable to assume that providers that target ethnic-specific or age-specific populations are serving these populations. It is likely that services which do not specify a particular ethnicity as the target population also reach members of these populations. Demographic information for service providers will be available approximately three months after the end of the contract period. It will not be possible to break down this information by intervention or by BRP. Demographic information by intervention type and by BRP will be available for those programs funded beginning in 1997.

Services by Agency - Exhibit 7.1

Exhibit 7.1 lists services by agency. Collaborations are listed according to Fiscal Agent. Information in this exhibit includes:

- **Agency name**
- **Intervention type** - The intervention type is based on those interventions listed in the Strategies and Interventions Chapter completed in 1995. Peer education programs were listed as multiple session groups.
- **Behavioral risk population** - BRPs are based on the twelve behavioral risk populations listed and prioritized in the Priority-Setting chapter developed in 1995. As the paradigm shift from target groups to behavioral risk populations will occur in services funded after December 1996, providers were not required to use BRPs in developing the interventions shown in this resource inventory. Information by AIDS Office staff about services was gathered from existing contracts and the translation was made from provider defined target group to behavioral risk population.
- **Provider defined target group** - This section lists how the service provider defines the population which they are serving. Since providers will not be required to target interventions according to BRPs until 1997, this section may provide the best description of actual populations reached through prevention services.
- **Behaviors targeted** - This section lists those risk behaviors which are targeted by the provider. Behaviors included are those risk behaviors for HIV that are contained in the Priority-Setting Matrix listed in the Priority Setting Chapter. Providers were not required to list behaviors targeted for the time period that this resource inventory covers, but if behaviors were mentioned in the contract, they are included in this section.
- **Funding source and amount** - This section lists the funding source, either CDC, City and County of San Francisco General Fund, or California Department of Health Services Office of AIDS funding. Please note CDC funding is for the 1996 calendar year and State and General funded services are for fiscal year 1996/97. It is not possible to

delineate amounts of funding for each intervention type for all service providers. This will be possible beginning in 1997.

- **Co-variates** - Co-variates are race/ethnicity, age, and geographic location where population may be served (if specified). As service providers are not required to list co-variates in their program narratives, co-variates were included in this exhibit only if they were mentioned by the provider. If no specific co-variates are listed it should be assumed that services are targeting the diverse population of San Francisco. Beginning in 1997, providers funded by the AIDS Office will be required to list co-variates.
- **Co-factors** - Co-factors are identified in the Epidemiology Profile, Chapter 3. Co-factors by themselves do not directly increase ones risk for HIV, but might influence behaviors that increase the risk for HIV. Co-factors included in this exhibit are taken from program contracts and do not represent an exhaustive list, as providers were not explicitly asked to discuss co-factors in their scope of work. Starting in 1997, a description of co-factors and how they affect the behavioral risk population is required by the AIDS Office for all funded service providers.

Services by Behavior Risk Population - Exhibit 7.2

This exhibit lists HIV Prevention Services by behavioral risk population. BRPs are taken from the Priority Setting Chapter completed in 1995, and shown on the attached key. This exhibit shows co-variates (race/ethnicity and age), intervention type, and agency providing the service. Programs that did not specifically mention co-variates in their contracts were categorized as serving a multi-ethnic population and all ages. However it should be noted that both age and race/ethnicity distribution is unknown. It was not possible to accurately delineate funding amounts for behavioral risk populations since providers were not required to target interventions according to the BRPs at the time. Beginning in 1997 this information will be available.

Services by Intervention Type - Exhibit 7.3

Exhibit 7.3 is organized by intervention type. From this exhibit it is possible to see which behavioral risk populations are being served across interventions. The interventions listed are taken from the 1995 Strategies and Interventions Chapter. They are further broken down into BRPs, co-variates and agencies. As stated previously, it should *not* be assumed that agencies which target multiple BRPs are reaching all BRPs equally. In addition, it is not possible to list funding amounts per intervention, as program contracts are not executed in a way that allows this information to be calculated. Beginning in 1997, contracts will be written so that this information will be available.

Training and Technical Assistance Services - Exhibit 7.4

This exhibit lists training and technical assistance services which are currently (1996) funded by the AIDS Office. They were not included in the previous exhibits because they do not provide direct prevention services.

KEY FOR RESOURCE INVENTORY

Funding Cycles

CDC = January, 1996 - December, 1996

City & County General Fund = July, 1996 - June, 1997

State = July, 1996 - June, 1997

Interventions

VBIO = Venue-Based Individual Outreach

VBGO = Venue-Based Group Outreach/ Events

CTRPN = Counseling, Testing, Referral, &
Partner Notification

SSG = Single Session Group Education

MSG = Multiple Session Group

Hotline = Hotline

IRRC = Individual Risk Reduction Counseling

PCM = Prevention Case Management

NE = Needle Exchange

Media = Media

Agencies/ Providers

AAP = Asian AIDS Project

AHP = UCSF AIDS Health Project

BCA = Black Coalition on AIDS

Brothers = Brothers Network

BVHPF = Bay View Hunter's Point Foundation

CCHP = Central City Hospitality House

CFY = Chances for Youth

City Clinic = SFDPH City Clinic

CUAV = Community United Against Violence

Family Health = SFDPH Family Health Bureau

FAP = SFDPH Forensic AIDS Project

HAFCI = Haight Ashbury Free Clinic

ICHO = Institute for Community Health Outreach

IFR = Instituto Familiar de la Raza

Iris = Iris Center

Larkin = Larkin Street Youth Services

Living Well = The Living Well Project

NAAP = Native American AIDS Project

New Leaf = New Leaf

Planned Parenthood = Planned Parenthood

Proyecto = Proyecto Contra Sida Por Vida

RAP = Real Alternatives Project

SFAF = San Francisco AIDS Foundation

SFGH = SFDPH San Francisco General Hospital

SFWC = San Francisco Women's Center

SPY = SFDPH Special Programs for Youth

STOP AIDS = The STOP AIDS Project

TARC = Tenderloin AIDS Resource Center

UHS = UCSF/ Urban Health Study

Wedge = SFDPH Wedge Program

Westside = Westside Mental Health

WNC = Women's Needs Center

YUTHE = SFDPH STD Prevention and Control

Behavioral Risk Populations

1 Males, transgender male-to-female (pre-operative), and transgender female-to-male (post-operative) who have sex with males and inject drugs.

2 Males, transgender male-to-female (pre-operative), and transgender male-to-female (post-operative) who have sex with males and females and inject drugs.

3 Males, transgender male-to-female (pre-operative), and transgender female-to-male (post-operative) who have sex with males.

4 Males, transgender male-to-female (pre-operative), and transgender female-to-male (post-operative) who have sex with males and females.

5 Females, transgender female-to-male (pre-operative), and transgender male-to-female (post-operative) who have sex with males and inject drugs.

6 Males, transgender male-to-female (pre-operative), and transgender female-to-male (post-operative) who have sex with females and inject drugs.

7 Females, transgender female-to-male (pre-operative), and transgender male-to-female (post-operative) who have sex with males and females and inject drugs.

8 Females, transgender female-to-male (pre-operative), and transgender male-to-female (post-operative) who have sex with females and inject drugs.

9 Females, transgender female-to-male (pre-operative), and transgender male-to-female (post-operative) who have sex with males and females.

10 Females, transgender female-to-male (pre-operative), and transgender male-to-female (post-operative) who have sex with males.

11 Males, transgender male-to-female (pre-operative), and transgender female-to-male (post-operative) who have sex with females.

12 Females, transgender female-to-male (pre-operative), and transgender male-to-female (post-operative) who have sex with females

Exhibit 7.1. HIV Prevention Services by Agency (SFDPH-AIDS Office Funded)

Agency	Funding	Intervention Type	Behaviors Targeted (assumes unprotected)	Provider Defined Target Population	Behavioral Risk Group	Covariates	Co-factors
Asian AIDS Project	State \$125,000	VBIO VBGO SSG MSG	Anal receptive & insertive Vaginal insertive	API MSM, MSM/F who speak Tagalog, Ilocano, Thai, Lao, Vietnamese, Cantonese & Mandarin	3 and 4	API	Monolingual
Bayview Hunters Point Foundation	General \$69,000	SSG	Unsterile needle use Anal receptive & insertive Vaginal receptive & insertive	Clients of BVHP Substance Abuse Programs and other individuals at high risk of HIV infection	1 through 12	African American Bay View/ Hunter's Point District	Substance use Low income
	CDC \$50,000	CTRPN		Clients of BVHP Substance Abuse Programs	1 through 12	African American	
Black Coalition On AIDS (BCA)	CDC \$29,835 **	VBIO SSG MSG	Anal receptive & insertive Vaginal insertive & receptive Unsterile needle use	African American MSM, FSM, MSF-IDU ages 13 and older who engage in high risk behaviors, are low income, have high rates of STDs, have multiple partners and/ or are CSWs.	1, 2, 3, 4, 5, 6 & 10	African American SE San Francisco Corridor	Risky Partner Substance use CSWs STDs
	State \$145,000						
Central City Hospitality House	General \$52,672	VBGO SSG	Anal receptive & insertive Vaginal insertive & receptive Unsterile needle use		1 through 12	Youth	Homeless and runaway
Community United Against Violence (CUAV)	General \$11,092	VBGO (Speaker's bureau)			1 through 12	Youth (in-school)	
Haight Ashbury Free Clinic (HAFCI)/ Haight Ashbury Youth Outreach Team (HAYOT)	General \$43,749	VBIO SSG	Unsterile needle use Anal receptive & insertive Vaginal insertive & receptive	Young (12-25) IDUs and their sex partners who are homeless and runaway	1 through 12	Youth (12-25) Haight Ashbury Neighborhood	Risky partner Substance use Homeless
	CDC \$63,400 **	VBIO SSG IRRC	Unsterile needle use Anal receptive & insertive Vaginal insertive & receptive	and frequent the Haight Street corridor	1 through 12	Youth (12-25) Haight Ashbury Neighborhood	Out of TX cocaine & amphetamine Risky partner Substance use

*Funding cycles for CDC = January, 1996- December, 1996; for General Fund and State = July, 1996 - June, 1997.

** Denotes CDC Supplemental funding which specifically targets out of treatment cocaine and amphetamine injection drug users / female partners of IDUs.

*** Denotes peer programs which are categorized as multiple session groups.

Exhibit 7.1 HIV Prevention Services by Agency (SFDPH-AIDS Office Funded)

Agency	Amount	Intervention Type	Behavior Targeted (assumes unprotected)	Provider Defined Target Population	Behavioral Risk Group	Co-variates	Co-factors
HAFCI	General \$46,091	VBGO IRRC SSG Media	Unsterile needle use Anal receptive & insertive Vaginal insertive & receptive	Young (12-25) IDUs and their sex partners who are homeless and runaway and frequent the Haight Street corridor	1 through 12	Youth (12-25) Haight Ashbury Neighborhood	Risky partner Homeless Substance use
	General \$66,801 CDC\$85000	CTRPN		Persons not yet infected who are at high risk because of drug-using practices	1 through 12	Youth	Homeless
HAFCI/ Women's Needs Center	General \$51,423 State \$85,000	PCM VBIO	Unsterile needle use Anal receptive Vaginal receptive Giving fellatio Giving & receiving cunnilingus (during menses and between) Vaginal to vaginal (during & between menses) Sharing sex toys	FSM-IDU, FSM/F-IDU, FSF-IDU, FSM/F, FSM, & FSF who may: be homeless, living in poverty, have a history of sexual or physical violence, have risky partners, have lack of social support, and a lack of access to services.	5, 7, 8, 9, 10 & 12	Multi-ethnic	CSWs Low-income Risky partner Homeless
Instituto Familiar de La Raza (IFR)/ Aguilas	General \$132,109	VBGO SSG	Anal receptive & insertive Vaginal insertive		3 & 4	Latina/os in the Mission, Bernal Heights, Diamond Heights, Civic Center & Castro	Monolingual Immigrants Low-income Substance use
Iris Center	General \$66,724	VBGO MSG Media SSG	Unsterile needle use Anal receptive intercourse Vaginal receptive Fellatio Sharing unclean sex toys	FSM-IDU, FSM/F-IDU, FSM, & FSF who use substances, are low-income, have multiple and/or risky partners, who may be commercial sex workers	5, 7, 10 & 12	Multi-ethnic (African American & Latina Women)	Substance use Low income Homeless Commercial sex Workers (CSWs)
	State \$112,293	MSG	Unsterile needle use Vaginal receptive Vaginal to vaginal (during & between menses) Anal receptive Giving fellatio Giving and receiving cunnilingus (during & between menses)		5, 7, 10 & 12		Risky partner

*Funding cycles for CDC = January, 1996- December, 1996; for General Fund and State = July, 1996 - June, 1997.

** Denotes CDC Supplemental funding which specifically targets out of treatment cocaine and amphetamine injection drug users / female partners of IDUs.

*** Denotes peer programs which are categorized as multiple session groups.

Exhibit 7.1 HIV Prevention Services by Agency (SFDPH-AIDS Office Funded)

Agency	Amount	Intervention Type	Behavior Targeted (assumes unprotected)	Provider Defined Target Population	Behavioral Risk Group	Co-variates	Co-factors
Lavender Youth Recreation and Information Center (LYRIC)	State \$103,830	MSG*** SSG	Anal receptive and insertive Vaginal insertive Receiving & giving fellatio	MSM, MSM/F 13-26 who engage in substance use/abuse and have multiple partners	3 & 4	Youth (13-26)	Substance use
Living Well Project /GCHIP	General \$76,040	VBIO VBGO SSG MSG IRRC	Anal receptive & insertive Vaginal insertive	APIs in group 3 & 4 with a focus population of: self-identified: API MSM, MSM/F; immigrant ethnically identified MSM & MSM/F; and young ethnically identified MSM & MSM/F	3 & 4	API	
Living Well Project/ Asian AIDS Project	General \$57,900	VBIO SSG MSG VBGO	Anal receptive & insertive Vaginal insertive	API MSM & MSM/W with an emphasis on Thai & Lao MSM & MSM/W & male hustlers	3 & 4	API	Monolingual (Thai & Lao) Immigrant CSWs
National Task Force on AIDS Prevention (NTFAP) - Native American AIDS Project (NAAP)	State \$82,000	MSG VBIO VBGO	Anal receptive Vaginal receptive & insertive Unsterile needle use	Native American/Alaskan Natives who are MSMs, MSF-IDU & FSM-IDUs	3, 5, 6 & 11	Native American/ Alaskan Native	Substance use Low-income STDs
New Leaf (formerly Operation Concern/18th St. Services)	General \$157,726	IRRC MSG	Unsterile needle use Anal receptive & insertive Vaginal insertive	Males and transgender females to males who have unprotected sex with males and those who also use IV drugs unsafely. Females and transgender males to females who have unprotected sex with females &/or males and those who also use IV drugs unsafely.	1, 2, 3 & 4		Substance use Mental health
	State \$80,500	VBIO SSG PCM		MSM-IDU, MSM/F-IDU, MSM, MSM/F 13-25 who may be using substances & may work in sex trade		Youth (13-25)	Low-income CSWs Substance use
	CDC \$40,000	CTRPN	Anal receptive Vaginal receptive Vaginal insertive	MSM-IDU, MSM/F-IDU, MSM MSM/F, transgender, focus on youth	1 through 12	Youth (12-25)	Homeless

*Funding cycles for CDC = January, 1996- December, 1996; for General Fund and State = July, 1996 - June, 1997.

** Denotes CDC Supplemental funding which specifically targets out of treatment cocaine and amphetamine injection drug users / female partners of IDUs.

*** Denotes peer programs which are categorized as multiple session groups.

Exhibit 7.1 HIV Prevention Services by Agency (SFDPH-AIDS Office Funded)

Agency	Amount	Intervention Type	Behavior Targeted (assumes unprotected)	Provider Defined Target Poulation	Behavioral Risk Group	Co-variates	Co-factors
Planned Parenthood	General \$54,068	SSG	Unsterile needle use Anal receptive intercourse Vaginal receptive Fellatio Sharing unclean sex toys	FSM-IDU, FSM/F-IDU, FSM, & FSF who use sub- stances, are low-income, have multiple and/or risky partners	5, 7, 8, 9, & 10	Multi-ethnic	Low Income Risky partner
S F AIDS Foundation (SFAF)	General \$211,807	Media	Unsterile needle use Anal insertive & receptive Vaginal insertive & receptive	IDUs and gay men	1 through 8	Multi-ethnic	Substance use
SFAF/Prevention Point	CDC\$100000 General \$334,596	NE	Unsterile needle use		1 through 8		Substance use CSWs Risky partner
SFAF	General \$128,475	Hotline	All		1 through 12		
SFDPH-STD Prevention and Control (YUTHE Project)	State \$143,980	MSG*** IRRC VBIO	Vaginal receptive & insertive Anal receptive & insertive	Multi-ethnic adolescents (12-17) who reside or hang out in high STD morbidity neighborhoods with an emphasis on African American youth from low income households who may lack access to health care and experience discrimination.	10 & 11	Youth (12-17) Multi-ethnic emphasis on African American)	STDs Low-income
SFDPH-City Clinic	CDC \$561,824	CTRPN	First time testers Anal receptive	MSM	1 through 12		STDs
SFDPH- Family Health	CDC \$182,701	CTRPN	First time testers Vaginal receptive	FSM-FSF/M-IDU MSM, FSF	1 through 12		STDs
SFDPH- Forensic AIDS Project	CDC \$363,098	SSG IRRC CTRPN		Incarcerated Adults	1 through 12		Incarcerated Adults
SFDPH- General Hospital	CDC\$266703	CTRPN	First time testers				
SFDPH Special Programs For Youth (SPY)	CDC \$193,934	SSG IRRC CTRPN		Youth who are involved or at high risk of becoming involved in the juvenile justice system	1 through 12 emphasis on 1, 2, 3, 4, 5 & 7	Youth (12-17) Multi-ethnic	Incarcerated youth Risky partner Low-income Homeless

*Funding cycles for CDC = January, 1996- December, 1996; for General Fund and State = July, 1996 - June, 1997.

** Denotes CDC Supplemental funding which specifically targets out of treatment cocaine and amphetamine injection drug users / female partners of IDUs.

*** Denotes peer programs which are categorized as multiple session groups.

Exhibit 7.1 HIV Prevention Services by Agency (SFDPH-AIDS Office Funded)

Agency	Amount	Intervention Type	Behavior Targeted (assumes unprotected)	Provider Defined Target Population	Behavioral Risk Group	Co-variates	Co-factors
SFDPH Wedge Program	CDC \$367,016	MSG	Unsterile needle use Anal receptive & insertive Vaginal receptive & insertive Giving & receiving fellatio Giving & receiving cunnilingus (during menses and between) Vaginal to vaginal (during & between menses) Sharing sex toys	In school youth (12-19)	1 through 12	In-school youth	
S F Women's Center/ Institute of Community Health Outreach (ICHO)	CDC \$125,000	MSG SSG PCM	Anal receptive Vaginal receptive	Young women; women of all races, ethnicities regardless of age who have unprotected sex with IDUs or multiple sex partners and/or women who engage in behaviors that place them at risk for HIV	5, 7, 9 & 10	Youth (17-25) Multi-ethnic	CSWs Low-income
The STOP AIDS Project	CDC \$88,791	MSG SSG VBIO VBGO	Anal insertive & receptive	Young MSM	3 & 4	Youth (18-25)	
	General \$151,427 Gen.\$100199	VBGO					Castro, Polk, SoMa
	State \$150,000	MSG SSG				Multi-ethnic Youth (< 25 years)	
Tenderloin AIDS Resource Center (TARC)	General \$15,971	VBGO Media	Unsterile needle use Anal insertive & receptive Vaginal insertive & receptive	IDUs, especially persons who are racial, ethnic, cultural, or sexual minority members and transgender IDUs and hormone users and their sexual partners and other substance users of all ages and ethnicity and their sexual partners.	1 through 12	Multi-ethnic Transgender	Risky partner Substance use
	\$36,379 General	MSG*** IRRC SSG		Substance users, their sexual partners and transgender persons and their sexual partners			Substance use

*** Denotes peer programs which are categorized as multiple session groups.

Exhibit 7.1 HIV Prevention Services by Agency (SFPDPH-AIDS Office Funded)

Agency	Amount	Intervention Type	Behavior Targeted (assumes unprotected)	Provider Defined Target Population	Behavioral Risk Group	Co-variates	Co-factors
UCSF/AIDS Health Project (AHP)	General \$111,877	MSG	Anal insertive & receptive	Self-identified gay & bisexual men who are 25 years and older, of all ethnic and various socioeconomic backgrounds, who are residents of San Francisco. Services targets HIV- men.	3 & 4		Substance use
	CDC \$367,204 State \$311,821	CTRPN	First time testers Anal insertive + receptive Vaginal insertive + receptive	MSM MSM/F-IDU FSF-Share toys	1 through 12		Homeless Hearing-impaired
UCSF/Urban Health Study	CDC \$466,849 \$35,098*	VBIO VBGO CTRPN	Unsterile needle use	Active injection drug users	1, 2, 5, 6, 7 & 8	Multi-ethnic	Substance use Low-income
	CDC \$207,974 \$158,200	MSG CTRPN	Anal insertive & receptive Vaginal insertive & receptive MSM-IDU FSM/F-IDU	Adult and adolescent substance abusing populations & needle sharing partners that present for services	5, 7, 8 & 10 1 through 12	Multi-ethnic African American	Low-income Housing Low literacy Physical Abuse Risky partner Homeless

*Funding cycles for CDC = January, 1996- December, 1996; for General Fund and State = July, 1996 - June, 1997.

** Denotes CDC Supplemental funding which specifically targets out of treatment cocaine and amphetamine injection drug users / female partners of IDUs..

*** Denotes peer programs which are categorized as multiple session groups.

Exhibiti 7.1 HIV Prevention Services by Agency (SFDPH-AIDS Office Funded)

Collaboration Name Fiscal Agent & Collaborators	Amount	Intervention Type	Behavior Targeted (assumes unprotected)	Provider Defined Target Population	Behavioral Risk Groups	Co-variates	Co-factors
Chances for Youth Living Well Project	General \$167,971	MSG*** VBGO SSG VBIO	Anal receptive & insertive Vaginal insertive		3 & 4	API Youth (18-25)	Monolingual
Proyecto Contra Sida Por Vide (Proyecto)		IRRC SSG MSG VBGO				Latino Youth (18-25) Transgender	Monolingual Undocumented Substance use
Larkin Street		IRRC VBGO SSG Media				Latino Youth (12-17) Polk, Tenderloin, Haight & Civic Center	Substance use Homeless/ Runaway CSWs
Chances for Youth Living Well Project	CDC \$488,195	MSG VBGO SSG IRRC	Anal receptive & insertive Vaginal insertive		3 & 4	API Youth (18-25)	Monolingual
Proyecto Contra Sida Por Vide (Proyecto)						Latino Youth (18-25) Transgender	Monolingual Undocumented Substance use Low-income
Brother's Network		MSG VBGO SSG IRRC				African American Youth (12-17)	Substance use Low income
Community Outreach Program HAFCI ICHO	CDC \$750,000 \$105,000**	VBIO	All, emphasis on Unsterile needle use Anal receptive & insertive Vaginal insertive and receptive	MSM, MSM-IDU, hetero- sexual IDU and other sub- stance users, high-risk any of the above groups	All, emphasis on 1 through 8	Youth (12-25) African American	CSWs Risky Partner
Proyecto Contra Sida							
TARC							
New Leaf							
AAP							

*Funding cycles for CDC = January, 1996- December, 1996; for General Fund and State = July, 1996 - June, 1997.

** Denotes CDC Supplemental funding which specifically targets out of treatment cocaine and amphetamine injection drug users / female partners of IDUs..

*** Denotes peer programs which are categorized as multiple session groups.

Exhibit 7.1 HIV Prevention Services by Agency (SFDPH-AIDS Office Funded)

Collaboration Name (Fiscal Agency)	Amount	Intervention Type	Behavior Targeted (assumes unprotected)	Provider Defined Target Population	Behavioral Risk Groups	Co-variates	Co-factors
Kokua ((NTFAP) NAAP	General \$523,031	SSG	All	MSMs, IDUs and their sex partners & sexually active youth	1 through 12	Native American/ Alaskan Native	Substance use
Proyecto Contra Sida		SSG MSG Media	Anal insertive & receptive Vaginal insertive	Latino gay and bisexual men, latino youth, trans- gender including mono- lingual recent immigrants	3 & 4	Mission District Multi-ethnic (emphasis Latino) Transgender	Monolingual Low-income Immigrants
Brother's Network		VBIO VBGO MSG Media	Unsterile needle use Anal insertive & receptive Vaginal insertive	African American MSM and self-identified gay & bisex- ual men & transgender persons who engage in high risk sexual behavior and injection drug use.	1, 2, 3 & 4	African American Transgender	
Real Alternatives Program (RAP) RAP	State \$250,000	VBIO PCM MSG	Anal receptive & insertive Vaginal receptive & insertive Anal insertive & receptive Vaginal insertive Vaginal receptive	Multi-ethnic males and fe- males, ages 12-23, who have issues with substance use, have multiple and risky partners, who suffer from discrimination and who re- side or hang out in the Mission District.	10 & 11	Youth Multi-ethnic Mission District	Risky Partner Low- income Incarceration
IFR		PCM MSG VBIO	Anal receptive & insertive Vaginal insertive	MSM, MSM/F who are Latino including Latino immigrants ages 18-50 with substance use issues in the Mission & Tenderloin districts.	3 & 4	Latino Mission, Bernal Heights & Tenderloin	Immigrants Risky Partner Monolingual Substance use Racism
		VBIO SSG PCM	Anal receptive & insertive Vaginal receptive & insertive	Latino immigrant females who have sex with males who are MSM/F, IDUs, and/ or have multiple partners	10		Domestic Violence

*Funding cycles for CDC = January, 1996- December, 1996; for General Fund and State = July, 1996 - June, 1997.

** Denotes CDC Supplemental funding which specifically targets out of treatment cocaine and amphetamine injection drug users / female partners of IDUs.

*** Denotes peer programs which are categorized as multiple session groups.

Exhibit 7.2 HIV Prevention Services by Behavioral Risk Group (SFDPH-AIDS Office Funded)

Behavioral Risk Group	Co-variate	Intervention Type	Agency
1 MSM-IDU	Multi-ethnic All ages (Age & ethnic distribution unspecified and unknown)	Venue-based individual outreach	UHS, ICHO
		Venue-based group outreach	UHS, TARC
		Single session groups	FAP, TARC
		Multiple session groups	New Leaf, TARC
		Indiv. risk reduction counseling	New Leaf, FAP, TARC
		Media	SFAF, TARC
		Hotline	SFAF
		Needle Exchange	SFAF/HPP
		CTRPN	City Clinic, Family Health, FAP, SFGH, New Leaf, HAFCI, UHS, BVHPF, AHP, Westside
	African American	Venue-based individual outreach	BCA, Brothers, ICHO
		Venue-based group outreach	Brothers
		Single session groups	BCA, BVHPF
		Multiple session groups	BCA, Brothers
		Media	Brothers
	Latino	Hotline (Spanish language)	SFAF
	API	Hotline (Filipino languages)	SFAF
	Native American/ Alaskan Native	Single session groups	NAAP
	Youth	Venue-based individual outreach	CCHH, HAFCI, New Leaf
		Venue-based group outreach	CUAV, HAFCI
		Single session groups	CCHH, New Leaf, HAFCI/HAYOT, SPY
		Multiple session groups	Wedge
		Indiv. risk reduction counseling	HAFCI, SPY
		Prevention case management	New Leaf
		Media	HAFCI
		CTRPN	SPY, Family Health

Exhibit 7.2 HIV Prevention Services by Behavioral Risk Group (SFDPH-AIDS Office Funded)

Behavioral Risk Group	Co-variate	Intervention Type	Agency
2 MSM/F-IDU	Multi-ethnic All ages (Age & ethnic distribution unspecified and unknown)	Venue-based individual outreach	UHS, ICHO
		Venue-based group outreach	UHS, TARC
		Single session groups	FAP, TARC
		Multiple session groups	New Leaf, TARC
		Indiv. risk reduction counseling	New Leaf, FAP, TARC
		Media	SFAF, TARC
		Hotline	SFAF
		Needle exchange	SFAF/HPP
		CTRPN	City Clinic, Family Health, FAP, SFGH,
			New Leaf, HAFCI, UHS, BVHPF, AHP, Westside
	African American	Venue-based individual outreach	BCA, ICHO, Brothers
		Venue-based group outreach	Brothers
		Single session groups	BCA, BVHPF
		Multiple session groups	BCA, Brothers
		Media	Brothers
	Latino	Hotline (Spanish language)	SFAF
	API	Hotline (Filipino languages)	SFAF
	Native American/ Alaskan Native	Single session groups	NAAP
	Youth	Venue-based individual outreach	CCHH, HAFCI, New Leaf
		Venue-based group outreach	CUAV, HAFCI
		Single session groups	CCHH, New Leaf, HAFCI, SPY
		Multiple session groups	Wedge
		Indiv. risk reduction counseling	HAFCI, SPY
		Prevention case management	New Leaf
		Media	HAFCI
		CTRPN	SPY, Family Health

Exhibit 7.2 HIV Prevention Services by Behavioral Risk Group (SFDPH-AIDS Office Funded)

Behavioral Risk Group	Co-variate	Intervention Type	Agency
3 MSM	Multi-ethnic All ages (Age & ethnic distribution unspecified and unknown)	Venue-based individual outreach	ICHO
		Venue-based group outreach	STOP AIDS, TARC
		Single session groups	STOP AIDS, FAP, TARC
		Multiple session groups	New Leaf, AHP, STOP AIDS, TARC
		Indiv. risk reduction counseling	New Leaf, FAP, TARC
		Media	SFAF, TARC
		Hotline	SFAF
		CTRPN	City Clinic, Family Health, FAP, SFGH, New Leaf, HAFCI, UHS, BVHPF, AHP, Westside
	African American	Venue-based individual outreach	BCA, Brothers
		Venue-based group outreach	Brothers
		Single session groups	BVHPF, BCA, Brothers
		Multiple session groups	BCA, Brothers
		Indiv. risk reduction counseling	Brothers
		Media	Brothers
	Latino	Venue-based individual outreach	Proyecto, IFR
		Venue-based group outreach	IFR, Proyecto
		Single session groups	IFR, Proyecto
		Multiple session groups	IFR, Proyecto
		Indiv. risk reduction counseling	Proyecto
		Prevention case management	IFR
		Media	Proyecto
		Hotline (Spanish language)	SFAF
	API	Venue-based individual outreach	AAP, Living Well
		Venue-based group outreach	AAP, Living Well
		Single session groups	AAP, Living Well
		Multiple session groups	AAP, Living Well
		Indiv. risk reduction counseling	AAP, Living Well
		Hotline (Filipino languages)	SFAF
	Native American/ Alaskan Native	Venue-based individual outreach	NAAP
		Venue-based group outreach	NAAP
		Single session groups	NAAP
		Multiple session groups	NAAP
	Youth	Venue-based individual outreach	HAFCI, New Leaf, STOP AIDS, Living Well
		Venue-based group outreach	Living Well, Proyecto, Larkin, Brothers, CCHH, CUAV, STOP AIDS
		Single session groups	CCHH, HAFCI, Lyric, New Leaf, SPY, STOP AIDS Living Well, Proyecto, Larkin, Brothers
		Multiple session groups	Wedge, STOP AIDS, Living Well, Proyecto, Larkin, Brothers, Lyric
		Indiv. risk reduction counseling	HAFCI, SPY, Living Well, Proyecto, Larkin, Brothers
		Prevention case management	New Leaf
		Media	HAFCI, Larkin
		CTRPN	SPY, Family Health

Exhibit 7.2 HIV Prevention Services by Behavioral Risk Group (SFDPH-AIDS Office Funded)

Behavioral Risk Group	Co-variate	Intervention Type	Agency
4 MSM/F	Multi-ethnic All ages (Age & ethnic distribution unspecified and unknown)	Venue-based individual outreach	ICHO
		Venue-based group outreach	STOP AIDS, TARC
		Single session groups	STOP AIDS,
		Multiple session groups	New Leaf, AHP, STOP AIDS
		Indiv. risk reduction counseling	New Leaf
		Media	SFAF
		Hotline	SFAF
		CTRPN	City Clinic, Family Health, FAP, SFGH, New Leaf, HAFCI, UHS, BVHPF, AHP, Westside
	African American	Venue-based individual outreach	BCA, Brothers
		Venue-based group outreach	Brothers
		Single session groups	BVHPF, BCA, Brothers
		Multiple session groups	BCA, Brothers
		Indiv. risk reduction counseling	Brothers
		Media	Brothers
	Latino	Venue-based individual outreach	Proyecto, IFR
		Venue-based group outreach	IFR, Proyecto
		Single session groups	IFR, Proyecto
		Multiple session groups	IFR, Proyecto
		Indiv. risk reduction counseling	Proyecto
		Prevention case management	IFR
		Media	Proyecto
		Hotline (Spanish language)	SFAF
	API	Venue-based individual outreach	AAP, Living Well
		Venue-based group outreach	AAP, Living Well
		Single session groups	AAP, Living Well
		Multiple session groups	AAP, Living Well
		Indiv. risk reduction counseling	AAP, Living Well
		Hotline (Filipino languages)	SFAF
	Native American/ Alaskan Native	Single session groups	NAAP
	Youth	Venue-based individual outreach	HAFCI, New Leaf, STOP AIDS, Living Well
		Venue-based group outreach	Living Well, Proyecto, Larkin, Brothers, CCHH, CUAV, STOP AIDS
		Single session groups	CCHH, HAFCI, Lyric, New Leaf, SPY, STOP AIDS, Living Well, Proyecto, Larkin, Brothers
		Multiple session groups	Wedge, STOP AIDS, Living Well, Proyecto, Larkin, Brothers, Lyric
		Indiv. risk reduction counseling	HAFCI, SPY, Living Well, Proyecto, Larkin, Brothers
		Prevention case management	New Leaf
		Media	HAFCI, Larkin
		CTRPN	SPY, Family Health

Exhibit 7.2 HIV Prevention Services by Behavioral Risk Group (SFDPH-AIDS Office Funded)

Behavioral Risk Group	Co-variate	Intervention Type	Agency
5 FSM-IDU	Multi-ethnic All ages (Age & ethnic distribution unspecified and unknown)	Venue-based individual outreach	WNC, UHS, ICHO
		Venue-based group outreach	Iris, SFWC/ICHO, UHS, TARC
		Single session groups	Iris, Planned Parenthood, SFWC/ICHO, FAP, TARC
		Multiple session groups	SFWC/ICHO, Westside, Iris, TARC
		Indiv. risk reduction counseling	FAP, TARC
		Prevention case management	WNC, SFWC/ICHO
		Media	SFAF, Iris, TARC
		Hotline	SFAF
		Needle exchange	HPP
		CTRPN	City Clinic, Family Health, FAP, SFGH, New Leaf, HAFCI, UHS, BVHPF, AHP, Westside
	African American	Venue-based individual outreach	BCA
		Single session groups	BVHPF, BCA
		Multiple session groups	BCA
	Latino	Hotline (Spanish language)	SFAF
	API	Hotline (Filipino languages)	SFAF
	Native American/ Alaskan Native	Venue-based individual outreach	NAAP
		Venue-based group outreach	NAAP
		Multiple session groups	NAAP
	Youth	Venue-based individual outreach	HAFCI
		Venue-based group outreach	CCHH, HAFCI, CUAV
		Single session groups	CCHH, HAFCI, SPY
		Multiple session groups	Wedge
		Indiv. risk reduction counseling	HAFCI, SPY
		Media	HAFCI
		CTRPN	SPY, Family Health

Exhibit 7.2 HIV Prevention Services by Behavioral Risk Group (SFDPH-AIDS Office Funded)

Behavioral Risk Group	Co-variate	Intervention Type	Agency
6 MSF-IDU	Multi-ethnic All ages (Age & ethnic distribution unspecified and unknown)	Venue-based individual outreach	UHS, ICHO
		Venue-based group outreach	UHS, TARC
		Single session group	TARC
		Multiple session group	TARC
		Indiv. Risk Reduction Counseling	TARC
		Media	SFAF, TARC
		Hotline	SFAF
		Needle exchange	HPP
		CTRPN	City Clinic, Family Health, FAP, SFGH, New Leaf, HAFCI, UHS, BVHPF, AHP, Westside
	African American	Venue-based individual outreach	BCA
		Single session groups	BVHPF, BCA
		Multiple session groups	BCA,
	Latino	Hotline (Spanish language)	SFAF
	API	Hotline (Filipino languages)	SFAF
	Native American/ Alaskan Native	Venue-based individual outreach	NAAP
		Venue-based group outreach	NAAP
		Multiple session groups	NAAP
	Youth	Venue-based individual outreach	HAFCI
		Venue-based group outreach	CCHH, HAFCI, CUAV
		Single session groups	CCHH, HAFCI, SPY
		Multiple session groups	Wedge
		Indiv. risk reduction counseling	HAFCI, SPY
		Media	HAFCI
		CTRPN	SPY, Family Health

Exhibit 7.2 HIV Prevention Services by Behavioral Risk Group (SFDPH-AIDS Office Funded)

Behavioral Risk Group	Co-variate	Intervention Type	Agency
7 FSM/F-IDU	Multi-ethnic All ages (Age & ethnic distribution unspecified and unknown)	Venue-based individual outreach	WNC, UHS, ICHO
		Venue-based group outreach	Iris, SFWC/ICHO, UHS, TARC
		Single session groups	Iris, Planned Parenthood, SFWC/ICHO, FAP, TARC
		Multiple session groups	SFWC/ICHO, Westside, Iris, TARC
		Indiv. risk reduction counseling	FAP, TARC
		Prevention case management	WNC, SFWC/ICHO
		Media	SFAF, Iris, TARC
		Hotline	SFAF
		Needle exchange	HPP
		CTRPN	City Clinic, Family Health, FAP, SFGH, New Leaf, HAFCI, UHS, BVHPF, AHP, Westside
	African American	Single session groups	BVHPF
	Latino	Hotline (Spanish language)	SFAF
	API	Hotline (Filipino languages)	SFAF
	Youth	Venue-based individual outreach	HAFCI
		Venue-based group outreach	CCHH, HAFCI, CUAV
		Single session groups	CCHH, HAFCI, SPY
		Multiple session groups	Wedge,
		Indiv. risk reduction counseling	HAFCI, SPY
		Media	HAFCI
		CTRPN	SPY, Family Health
8 FSF-IDU	Multi-ethnic All ages (Age & ethnic distribution unspecified and unknown)	Venue-based individual outreach	WNC, UHS, ICHO
		Venue-based group outreach	UHS, TARC
		Single session groups	Planned Parenthood, FAP, TARC
		Multiple session groups	Westside, TARC
		Indiv. risk reduction counseling	FAP, TARC
		Prevention case management	WNC
		Media	SFAF, TARC
		Hotline	SFAF
		Needle Exchange	HPP
		CTRPN	City Clinic, Family Health, FAP, SFGH, New Leaf, HAFCI, UHS, BVHPF, AHP, Westside
	African American	Single session groups	BVHPF
	Latino	Hotline (Spanish language)	SFAF
	API	Hotline (Filipino languages)	SFAF
	Youth	Venue-based individual outreach	HAFCI
		Venue-based group outreach	CCHH, HAFCI, CUAV
		Single session groups	CCHH, HAFCI, SPY
		Multiple session groups	Wedge
		Indiv. risk reduction counseling	HAFCI, SPY
		Media	HAFCI
		CTRPN	SPY, Family Health

Exhibit 7.2 HIV Prevention Services by Behavioral Risk Group (SFDPH-AIDS Office Funded)

Behavioral Risk Group	Co-variate	Intervention Type	Agency
9 FSM/F	Multi-ethnic All ages (Age & ethnic distribution unspecified and unknown)	Venue-based individual outreach	WNC
		Venue-based group outreach	TARC
		Single session groups	SFWC/ICHO, Planned Parenthood, FAP, TARC
		Multiple session groups	SFWC/ICHO, Westside, TARC
		Indiv. risk reduction counseling	FAP, TARC
		Prevention case management	WNC, SFWC/ICHO
		Media	SFAF, TARC
		Hotline	SFAF
		CTRPN	City Clinic, Family Health, FAP, SFGH, New Leaf, HAFCI, BVHPF, AHP, Westside
	African American	Single session groups	BVHPF
	Latino	Hotline (Spanish language)	SFAF
	API	Hotline (Filipino languages)	SFAF
	Youth	Venue-based individual outreach	HAFCI
		Venue-based group outreach	CCHH, HAFCI, CUAV
		Single session groups	CCHH, HAFCI, SPY
		Multiple session groups	Wedge
		Indiv. risk reduction counseling	HAFCI, SPY
		Media	HAFCI
		CTRPN	SPY, Family Health

Exhibit 7.2 HIV Prevention Services by Behavioral Risk Group (SFDPH-AIDS Office Funded)

Behavioral Risk Group	Co-variate	Intervention Type	Agency
10 FSM	Multi-ethnic All ages (Age & ethnic distribution unspecified and unknown)	Venue-based individual outreach	WNC, ICHO
		Venue-based group outreach	Iris, SFWC/ICHO, TARC
		Single session groups	Iris, Planned Parenthood, SFWC/ICHO, FAP, TARC
		Multiple session groups	SFWC/ICHO, Westside, Iris, TARC
		Indiv. risk reduction counseling	FAP, TARC
		Prevention case management	WNC, SFWC/ICHO
		Media	Iris, TARC
		Hotline	SFAF
		CTRPN	City Clinic, Family Health, FAP, SFGH, New Leaf, HAFCl, BVHPF, AHP, Westside
	African American	Venue-based individual outreach	BCA
		Single session groups	BVHPF, BCA
		Multiple session groups	BCA
	Latino	Venue-based group outreach	IFR
		Single session groups	IFR
		Prevention case management	IFR
		Hotline (Spanish language)	SFAF
	API	Hotline (Filipino languages)	SFAF
	Youth	Venue-based individual outreach	HAFCl, Yuthe, RAP
		Venue-based group outreach	CCHH, HAFCl, CUAV
		Single session groups	CCHH, HAFCl, SPY
		Multiple session groups	Wedge, Yuthe, RAP
		Indiv. risk reduction counseling	HAFCl, SPY, Yuthe
		Prevention case management	RAP
		Media	HAFCl
		CTRPN	SPY, Family Health

Exhibit 7.2 HIV Prevention Services by Behavioral Risk Group (SFDPH-AIDS Office Funded)

Behavioral Risk Group	Co-variate	Intervention Type	Agency
11 MSF	Multi-ethnic All ages (Age & ethnic distribution unspecified and unknown)	Venue-based individual outreach	ICHO
		Venue-based group outreach	TARC
		Hotline	SFAF
		CTRPN	City Clinic, Family Health, FAP, SFGH, New Leaf, HAFCI, BVHPF, AHP, Westside
	African American	Venue-based individual outreach	
		Single session groups	BVHPF
		Multiple session groups	
	Latino	Hotline (Spanish language)	SFAF
	API	Hotline (Filipino languages)	SFAF
	Native American/ Alaskan Native	Venue-based individual outreach	NAAP
		Venue-based group outreach	NAAP
		Multiple session groups	NAAP
	Youth	Venue-based individual outreach	HAFCI/HAYOT, Yuthe, RAP
		Venue-based group outreach	CCHH, HAFCI, CUAV
		Single session groups	CCHH, HAFCI, SPY
		Multiple session groups	Wedge, Yuthe, RAP
		Indiv. risk reduction counseling	HAFCI, SPY, Yuthe
		Prevention case management	RAP
		Media	HAFCI
		CTRPN	SPY, Family Health
12 FSF	Multi-ethnic All ages (Age & ethnic distribution unspecified and unknown)	Venue-based individual outreach	WNC, ICHO
		Venue-based group outreach	Iris, SFWC/ICHO, TARC
		Single session groups	Iris, FAP, TARC
		Multiple session groups	Iris, TARC
		Indiv. risk reduction counseling	FAP, TARC
		Prevention case management	WNC, SFWC/ICHO
		Media	Iris, TARC
		Hotline	SFAF
		CTRPN	City Clinic, Family Health, FAP, SFGH, New Leaf, HAFCI, BVHPF, AHP, Westside
	African American	Single session groups	BVHPF
	Latino	Hotline (Spanish language)	SFAF
	API	Hotline (Filipino languages)	SFAF
	Youth	Venue-based individual outreach	HAFCI
		Venue-based group outreach	CCHH, HAFCI, CUAV
		Single session groups	CCHH, HAFCI, SPY
		Multiple session group	Wedge
		Indiv. risk reduction counseling	HAFCI, SPY
		Media	HAFCI
		CTRPN	SPY, Family Health

Exhibit 7.3 HIV Prevention by Intervention Type (SFDPH- AIDS Office Funded)

Intervention Type	Behavioral Risk Group	Covariates	Agency
Individual Risk Reduction Counseling	1 through 12	African American	BVHPF
	1 through 12		SFDPH- Forensic
	1 through 12	Transgender	TARC
	1 through 12	Youth (12-17)	SPY
	1 through 12	Youth 12-25 in the	HAFCI
	1 through 12	Haight Ashbury	HAFCI-HAYOT
	1, 2, 3 & 4	Youth	New Leaf
	3 & 4	Youth, API	Living Well (CFY)
	3 & 4	Youth, Latino	Proyecto (CFY)
	3 & 4	Latino Youth	Larkin (CFY)
	3 & 4	Youth, African American	Brother's (CFY)
	3 & 4	API	Living Well/GCHP
	10 & 11	Youth/emphasis on African American	SFDPH-YUTHE
Prevention Case Management	1, 2, 3 & 4	Youth (13-25)	New Leaf
	3 & 4	Latinos in the Mission & Tenderloin	IFR (RAP/IFR)
	5, 7, 8, 9, 10 & 12		HAFCI/ Women's Needs Center
	5, 7, 9 & 10	Youth (18-25)	SFWC/ICHO
	10 & 11	Latinos in the Mission & Tenderloin	RAP/IFR
Media	1 through 12	Youth (12-25) in the Haight Ashbury	HAFCI
	1 through 12	Transgender	TARC
	1 through 8		SFAF
	1, 2, 3 & 4	Youth (12-17)	Larkin (CFY)
	1, 2, 3 & 4	African American	Brother's Network
	3		STD Ed. Unit
	3 & 4	Latinos in the Mission, Youth	Proyecto Contra Sida (KOKUA)
	3 & 4	African American Youth	Brother's (CFY)
Hotline	5, 7, 10 & 12	African American, Latina in the Mission District	Iris Center
	1 through 12	Spanish and Filipino language capabilities	SFAF
Needle Exchange	1, 2, 5, 6, 7 & 8		SFAF/HPP
Counseling, Testing, Referral & Partner Notification (CTRPN)	1 through 12	AA	BVHPF
		IDU	HAFCI, New Leaf
		STDs	SFDPH-City Clinic
		Female IDU	SFDPH Family Hlt
		Incarcerated Adults	SFDPH Forensic
			AIDS
		Homeless IDU	SFDPH SFGH
		Youth	AHP
		African American	Westside
		Incarcerated Youth	SPY

Exhibit 7.3 HIV Prevention by Intervention Type (SFDPH- AIDS Office Funded)

Intervention Type	Behavioral Risk Group	Co-variates	Agency
Single session groups	1 through 12		Forensic AIDS
	1 through 12	Transgender	TARC
	1 through 12	Youth (12-25) in the Haight Ashbury	HAFCI
	1 through 12	Incarcerated Youth (12-17)	SPY
	1 through 12	Youth	CCHP
	1 through 10	Native American/ Alaskan Native	NAAP (KOKUA)
	1, 2, 3, 4, 5, 6 & 10	African American	BCA
	1, 2, 5, 6, 7 & 8	Youth in the Haight Ashbury Neighborhood	HAFCI/HAYOT
	1, 2, 3 & 4	Latinos in the Mission, Castro, Bernal Heights, & Diamond Heights	IFR/Aguilas
	1, 2, 3 & 4	Youth (13-25)	New Leaf
	1, 2, 3 & 4		New Leaf
	1, 2, 3 & 4	Youth (12-17)	Larkin (CFY)
	3 & 4	Latino Youth (18-25)	Proyecto (CFY)
	3 & 4	Youth (13-26)	LYRIC
	3 & 4	Latinos in the Mission, Youth	Proyecto Contra Sida (KOKUA)
	3 & 4	API Youth	Living Well (CFY)
	3 & 4	African-American Youth	Brother's (CFY)
	3 & 4	Youth	STOP AIDS
	3 & 4	API	Living Well/GCHP
	3 & 4	API	Living Well/AAP
	3 & 4	API	AAP
	3 & 4	API Youth (18-25)	Living Well (CFY)
	5, 7, 9 & 10	Youth 17-25	SFWC/ICHO
	5, 7, 8, 9, 10 & 11		Planned Parenthood
	5, 7, 10 & 12	Latina & African American Women in the Mission	Iris Center
	10	Latinas in the Mission & Tenderloin	IFR (RAP/IFR)
		African American	BVHPF

Exhibit 7.3 HIV Prevention by Intervention Type (SFDPH- AIDS Office Funded)

Intervention Type	Behavioral Risk Group	Co-variates	Agency
Multiple Session Group	1 through 12	In-school youth	SFDPH-Wedge
	1 thorough 12	Transgender	TARC
	1 through 12	Native American/ Alaskan Native	NTFAP/NAAP
	1, 2, 3, 4, 5, 6 & 10	African American	BCA
	1, 2, 3 & 4	African American	Brother's Network (KOKUA)
	1, 2, 3 & 4		New Leaf
	1, 2, 3 & 4	Youth (12-17)	Larkin (CFY)
	3 & 4	Latino in the Mission	Proyecto
	3 & 4	African-American Youth	Brother's (CFY)
	3 & 4	Latino Youth (18-25)	Proyecto (CFY)
	3 & 4	Youth (13-26)	LYRIC
	3 & 4	Youth	STOP AIDS
	3 & 4	API	Living Well/GCHP
	3 & 4	API	Living Well/AAP
	3 & 4	API	AAP
	3 & 4	API Youth (18-25)	Living Well (CFY)
	3 & 4		AHP
	5, 7, 8 & 10		Westside
	5, 7, 9 & 10	Youth 17-25	SFWC/ICHO
	5, 7, 10 & 12	African American & Latina	Iris Center
	10	Latinas in the Mission & Tenderloin	IFR (RAP/IFR)
	10 & 11	African-American Youth	SFDPH-YUTHE

Exhibit 7.3 HIV Prevention by Intervention Type (SFDPH- AIDS Office Funded)

Intervention Type	Behavioral Risk Group	Co-variates	Agency
Venue-Based Individual Outreach	1 through 12	Youth	CCHP
	1 through 12	Native American/ Alaskan Native	NTFAP/NAAP
	1 through 12	Youth in the Haight Ashbury Neighborhood	HAFCI
	1 through 8		Cnty Outreach
	1, 2, 3, 4, 5, 6 & 10	African American	BCA
	1, 2, 5, 6, 7 & 8		UHS
	1, 2, 3 & 4	Youth (13-25)	New Leaf
	1, 2, 3 & 4	Youth (12-17)	Larkin (CFY)
	1, 2, 3 & 4	African American	Brother's Network (KOKUA)
	3 & 4	Latino Youth (18-25)	Proyecto (CFY)
	3 & 4	Latinos in the Mission & Tenderloin	IFR (RAP/IFR)
	3 & 4	API Youth (18-25)	Living Well (CFY)
	3 & 4	API	Living Well/ AAP
	3 & 4	API	Living Well/GCHP
	3 & 4	Youth	STOP AIDS
	3 & 4	API	AAP
	3 & 4	African American	Brother's Network (KOKUA)
	5, 7, 8, 9, 10 & 12		HAFCI/ WNC
	10	Latina/os in the Mission & Tenderloin	IFR (RAP/IFR)
	10 & 11	African-American Youth (12-17)	SFDPH-YUTHE
	10 & 11	Youth, Latino in the Mission & Tenderloin	RAP (RAP/IFR)

Exhibit 7.3 HIV Prevention by Intervention Type (SFDPH- AIDS Office Funded)

Intervention Type	Behavioral Risk Group	Co-variates	Agency
Venue-Based Group Outreach / Events	1 through 12	In-School Youth	CUAV
	1 through 12	Native American/ Alaskan Native	NTFAP/NAAP
	1 through 12	Transgender	TARC
	1, 2, 5, 6, 7 & 8		UHS
	1, 2, 3 & 4	Latinos in the Mission, Castro, Bernal Heights & Diamond Heights	IFR/Aguilas
	1, 2, 3 & 4	Latino Youth (12-17)	Larkin (CFY)
	3 & 4	African-American Youth	Brother's (CFY)
	3 & 4	API	Living Well/ GCHP
	3 & 4	API	Living Well/ AAP
	3 & 4	API	AAP
	3 & 4	Latino Youth (18-25)	Proyecto (CFY)
	3 & 4	Youth (18-25)	STOP AIDS
	3 & 4	Castro, Polk & South of Market Neighborhoods	STOP AIDS
	3 & 4	API Youth (18-25)	Living Well (CFY)
	3 & 4	African American	Brother's Network (KOKUA)

Exhibit 7.4 Training and Technical Assistance Contracts

Agency	Funding Source	Amount	Service
Polaris Research & Development (collaboration)	CDC	\$245,875	Logistical/Technical assistance to HPPC
UCSF/ AIDS Health Project	CDC	\$126,000	Training & education to prevention service providers (client centered counseling)
STD Prevention Training Center	CDC	\$215,466	Training & education to prevention service providers (client centered counseling, program planning, and evaluation.) Technical assistance liaison to AO/HPPC
Support Center (collaboration)	CDC	\$254,842	Organizational development/ capacity building

II. RECOMMENDATIONS FOR FORMAT OF FUTURE RESOURCE INVENTORIES

The Resource Allocation/Resource Inventory Committee developed recommendations for the format of the resource inventory in 1997, 1998 and beyond. These recommendations take into account the new information that will be available as providers' contracts and proposals shift to using behavioral risk populations and other requirements developed by the HPPC and implemented by the Office of AIDS.

Resource Inventory for end of 1997

For a plan update or revision at the end of 1997, the three charts on the preceding pages will be updated to include proposals funded for calendar year 1997 (CDC-funded) and fiscal year 1997/98 (State/General funds). Additionally, the 1997 plan would include a set of four summary charts based on proposals in that same funding cycle. These four summary charts are recommended to look much like the model below, with the amounts of money filled in.

Additionally, for January through December 1996 CDC funds and July 1996 through June 1997 State and General Funds, a rough estimate will be provided for Charts 2 and 4, below—Ethnicity and Age. For a Plan update in 1997 and beyond, a Resource Inventory will be compiled for prevention activities funded through sources other than the San Francisco Department of Public Health. These recommendations are intended to enable the HPPC to compare funding patterns by behavioral risk population from one year to the next, and to examine the shift in priorities over time.

Summary Charts: Based on Proposals Funded in 1997

Jan - Dec 1997 for CDC; July 1997 - June 1998 for State/General

Chart 1: Total Funds* by Intervention (Projected)

VBIO	VBGO	CTRPN	SSG	MSG	Hotline	IRRC	PCM	NE	Media
\$	\$	\$	\$	\$	\$	\$	\$	\$	\$

*CDC, State, and General Funds only

Chart 2: Total Funds by Ethnicity (Projected)

African Am.	Asian/Pac. Is.	Latino/a	Native Am.	White	Multi-cultural	Unspecified
\$	\$	\$	\$	\$	\$	\$

Chart 3: Total Funds by Behavioral Risk Group Clusters (Projected)*

1,2,3&4	3&4	5,6,8,9,10	5,7,9,&10	10&11	1 - 12	other
\$	\$	\$	\$	\$	\$	\$

*illustrative only - these may not be the actual clusters

Chart 4: Total Funds by Age Groups (Projected)*

under 18	18 - 24	25+	Mixed Age	Age unspecified
\$	\$	\$	\$	\$

*illustrative only - these may not be the actual age groups

Resource Inventory for end of 1998

For a plan update or revision at the end of 1998, the three main charts first used in 1996 again would be updated for proposals funded for calendar year 1998 (CDC-funded) and fiscal year 1998/99 (State/General funds). The 1998 plan, like the 1997 plan, would include the set of four small summary charts based on proposals in that same funding cycle. Additionally, starting in 1998, the resource inventory would include four charts that show information based on *actual numbers* served. This information would be for the previous year. For example, the resource inventory done at the end of 1998 would include the actual numbers served for calendar year 1997 (for CDC-funded proposals) and fiscal year 1997/98 (for State and General Funds). The designs for the three “actuals” charts are presented below (not all columns are shown, to save space).

Chart 1: Interventions and Ethnicity (Actual Numbers Served)

	VBIO	VBGO	CTRPN	Hotline	IRRC	PCM	NE	Media
African Am.								
A/PI								
Latino/a								
Native Am.								
White								
Multi-ethnic								
Unspecified								

Chart 2: Interventions and Behavior Risk Group Clusters* (Actual Numbers Served)

	VBIO	VBGO	CTRPN	Hotline	IRRC	PCM	NE	Media
1,2,3, & 4								
3 & 4								
5,6,7,8,9, 10, 12								
5,6,8, 10								
10, 11								
1 - 12								
Unspecified								

*illustrative only - these may not be the actual clusters

Chart 3: Interventions and Age Group Clusters*(Actual Numbers Served)

	VBIO	VBGO	CTRPN	Hotline	IRRC	PCM	NE	Media
Under 18								
18-24								
25+								
Mixed ages								
Unspecified								

*illustrative only - these may not be the actual clusters

CHAPTER 8 - LINKAGES

I. INTRODUCTION

Individuals at high risk of becoming HIV-infected often present with a complex set of issues and concerns. On the surface, many of these may seem unrelated to HIV risk. Issues can include substance abuse, mental health issues, homelessness, poverty, immigration issues, and unemployment. These needs are generally thought of greatest concern to individuals at risk, and they must be addressed before an individual can begin behavior change that reduces risk for HIV. In fact, these issues (also referred to as co-factors) often increase a person's likelihood of engaging in the high-risk behaviors that can lead to HIV transmission.

Meeting the basic and comprehensive needs of individuals at risk for HIV is critical to fostering the health behaviors that prevent HIV infection. At the same time, it is unrealistic to expect that HIV prevention providers will be able to address and meet all client needs within their own programs. This is where the importance of coordination and linkages among programs and services becomes apparent. A crucial component of linking among programs is the ability to make referrals to needed services outside the scope of what providers can offer in their own programs. In addition to referrals, linkages among HIV providers can include formalized working relationships, such as collaborations, shared projects or events planning, shared facilities, cooperative working agreements, informal networking, shared outreach, interagency case conferencing, and community meetings. All of these are ways that programs, agencies, and staff can work together to effectively provide more comprehensive, resource efficient, and effective services to the community.

This chapter contains recommendations for establishing and strengthening all types of linkages to improve HIV prevention. The larger part of this chapter is dedicated to referrals and informal linkages. Referral and linkage mechanisms currently working in San Francisco are described and HPPC recommendations are presented. The chapter also includes a section outlining the HPPC-defined required elements to ensure formal collaborations are effective.

The Committee and the Decision-making Process

The development of this chapter was guided by the work of the Linkages Committee of the HIV Prevention Planning Council (HPPC). This committee was comprised of six Council members and two AIDS Office staff members. From February to December 1996, the Committee met twelve times, and meetings lasted from two to three hours each. To assist the decision making process and the process for developing recommendations, the Committee relied on various reports and summaries from AIDS Office staff and the technical support consultants, Harder+Company. All Committee members provided input into the content of the recommendations. Final decisions about the language and content were made based on group consensus. Draft recommendations were presented to the full Council for feedback and approval.

in concept. After incorporating comments, the Committee obtained final approval from the HPPC.

II. METHODS FOR COLLECTING INFORMATION

The Linkages Committee of the San Francisco HIV Prevention Planning Council (HPPC) was charged with developing recommendations for linkages and referrals mechanisms for HIV prevention in San Francisco. The committee considered not only connections between HIV prevention providers, but also linkages between prevention providers and other types of services, programs, and departments. Examples of such relationships include relationships between HIV prevention and DPH programs such as substance abuse and mental health; city departments such as the School District, Social Services and Criminal Justice; and community-based service providers. The committee also considered prevention providers' links to services and treatment for those infected with HIV.

An understanding of how referral and linkage mechanisms currently function in San Francisco is necessary to assess their effectiveness. To this end, the technical support consultants were asked to conduct interviews with HIV prevention and other service providers in San Francisco. The Linkages Committee developed a list of potential informants and priority agencies in order to cover the broad spectrum of target populations and intervention types.

With input from Linkages Committee members and AIDS Office staff persons, the technical support staff developed an interview protocol which was reviewed and approved by the Committee. The protocol asked about providers' experience with referrals. Types of referrals included internal referrals within a single agency, external referrals to other agencies, and incoming referrals from other agencies. Informants were asked how referrals are made, to what types of services clients are referred, how clients are assessed for needed services, how referrals are documented and tracked, whether any follow-up is done, and how lists of resources are compiled. Informants were also asked about barriers to successful referrals, both in terms of actually providing a referral to a client and also the client's ability to access the service. Interviewers also probed informants for their ideas on making referrals more effective. The second part of the interview was concerned with other types of linkages, connections, agreements, or projects that programs had with other agencies. Informants were asked about what was working particularly well, and where they felt more linkages were needed.

A total of 19 interviews were conducted with a range of informants. Seven informants were from agencies providing a variety of prevention services (groups, individual counseling, case management, hotline), each to different target populations including African Americans, Asians and Pacific Islanders, Native Americans, Latina/os, young men who have sex with men, and youth. Other agencies represented included three counseling, testing, referral, and partner notification (CTRPN) providers, four providers who conduct outreach (one targeting youth specifically), two HIV care providers, one mental health provider, one substance abuse services provider, and one school-based clinic. Interviews lasted between 20 minutes and one hour. The interviews were conducted during June and July of 1996.

An additional source of information for this assessment was a report on preliminary findings of the Linkages Study conducted by the AIDS Office. This study looked at referral patterns and follow-up for people tested for HIV at City Clinic in San Francisco. These findings are presented throughout this chapter, as appropriate. Further, the Linkages Committee members were also interviewed as a group to generate discussion on their experiences and recommendations for referral mechanisms for HIV prevention.

The next several sections summarize the information gathered from interviews conducted with HIV prevention providers, care and treatment providers, and providers of other services; the group interview with Linkages Committee members; and preliminary findings from the AIDS Office's Linkages Study. The first section describes referral systems for HIV prevention providers, including counseling and testing. Following that is a discussion of linkages and coordination efforts, other than referrals, in which prevention providers are engaged. Referrals and linkages for other types of service providers and HIV/AIDS care providers are described in the next two sections. Suggestions from the field summarize providers' responses to inquiries about how to improve referrals and linkages in HIV prevention. HPPC recommendations for referrals and linkages conclude this topic.

III. PREVENTION PROVIDERS' USE OF REFERRALS

Types of Referral

The types of referrals made as part of an HIV prevention intervention span the entire spectrum of social services. Commonly made referrals include programs for general health care, HIV testing, substance abuse issues, needle exchange, domestic violence, housing, food, shelter, immigration and other legal issues, ESL and other education services, employment services, and job readiness programs. Other referrals are made to meet the special needs of populations such as youth, communities of color, transgender persons, and the disabled. Many providers also connect clients with income support programs such as Aid to Families with Dependent Children (AFDC), and General Assistance (GA).

Staff who initiate the referral might hold any number of positions within an agency. The majority of referrals are provided by street outreach workers, community health outreach workers (CHOWs), case managers (primarily prevention case managers), counselors, health educators, and clinic staff (e.g. nurse practitioners and nurses). Program coordinators may also provide referrals, depending on their level of client contact.

Counseling and testing providers are in a prime position to make referrals to a large population who are exhibiting risk behaviors for HIV. Anonymous HIV test providers refer at a minimum, to the AIDS Hotline, AIDS Nightline, National AIDS Hotline, and Sex Information Hotline, in addition to services appropriate for any other identified needs.

Providers' Knowledge of Referral Resources

Providers learn about available services informally through word-of-mouth and their experience in the field, and formally through written resource directories and materials, trainings, and community outreach formally introduce providers to services.

Informal Mechanisms

Many providers learn about most of their referral resources “through the grapevine.” Agencies tend to become known in the field for their particular assets and the need they fill. Providers also tend to develop a core set of services and agencies to which they refer their clients. Staff also reported acquiring knowledge of other referral resources directly from clients. These informal mechanisms provide the following advantages and disadvantages

Advantages

- New staff can rapidly learn the core network of agencies from their coworkers.
- In addition to objective facts about a resource, richer, more subjective information is passed along, such as what to expect from the other agency and hints about how to best work with it.
- Providers can update their knowledge of these resources on an ongoing basis.

Disadvantages

- Staff may rely too heavily on the few resources with which they are most familiar, and may become closed to new resources. Providers attempt to avoid this pitfall by holding staff meetings to discuss new services or changes in old services. Inviting agencies to present their services and make a personal contact with the program staff also helps with this potential problem.

Formal Mechanisms

Many providers learn about referral sources through a variety of formal mechanisms such as resource lists, resources guides, databases, and presentations by other programs about services available. They reported the following advantages and disadvantages.

Advantages

- Published resource lists can be very comprehensive.
- Agency presentations allow staff to meet face-to-face, make personal contacts, and tailor the information to specific populations.

Disadvantages

- Published guides rapidly become out of date.
- Guides do not always have all the information about services that providers need, such as language capabilities of staff.

Barriers to Providers' Knowledge of Referral Resources

Providers identified several barriers to knowing about available resources:

- **Lack of time.** It is important that providers know what is culturally appropriate, how the referral agency will feel to the client, and whether it is a welcoming environment. Providers need time to develop referral networks.
- **Rapid and frequent change among CBOs.** Providers have a difficult time keeping track of changes in staffing and programs. Without current information, a referral is less likely to be successful.
- **Lack of resources to update guides frequently.** As mentioned above, providers rely on written guides, but experience frustration with how quickly they become out of date.
- **Lack of agency resources to keep providers up-to-date.** Many agencies cannot provide the kind of training, orientation, and updates that staff need. Since staff are generally overworked, they tend to postpone doing this kind of networking on their own.

Proportion of Clients Receiving Referrals

Generally, providers attempt to offer referrals to as many clients as need them. However, the setting, length of contact time, and client trust level often limit referral opportunities. Overall, providers reported they make referrals to anywhere between 33% and 100% of their clients. Outreach workers and case managers, for example, focus on connecting clients with the services they need; thus, they reported providing referrals to a proportion of their clients that is closer to the 100% end of this range. All anonymous testing clients receive at least a referral list, and 74% are given additional referrals.

Client Assessment for Referral

For most providers, the decision to provide a referral results from a process that combines both formal and informal assessments. How assessments are conducted can vary according to many factors, but the service setting, nature of contact, and provider training and skill generally have the greatest bearing on the assessment process.

Informal assessments are generally done verbally and include client requests for services, client-provider dialogue, and provider intuitions. Outreach workers and CTRPN providers may only have a single, brief encounter in which to establish trust, conduct an assessment, provide a service, and make a referral. For these providers it is usually not possible to do a formal assessment.

Formal assessments, on the other hand, involve a written protocol form which the provider follows based on client response to questions regarding health and service needs. Content areas in these assessment protocols typically include demographic and personal

characteristics, psychosocial history, and history and current involvement in HIV and other health risk behaviors. Most prevention case managers, case managers, health care providers, and substance abuse and other counselors conduct an extensive psychosocial and health assessment to identify service referral needs.

Many providers actually use a combined approach of formal and informal assessments. Examples of this combined approach include:

- Substance abuse counselors use a formal assessment method to identify overall needs, but informal methods for identifying needs related to HIV prevention issues.
- Testing counselors take a client-centered approach initially to draw out client-identified needs, then they use a structured protocol to make more aggressive referrals based on their assessment of client needs. The rationale behind this philosophy is that testing is a one-time, brief intervention with clients who may not ever receive any other type of prevention intervention. It is important to take advantage of this opportunity to introduce prevention or risk reduction options to everyone who is at some risk for HIV.

Referral Mechanisms

Once clients' needs for referrals have been assessed, referrals are provided. Similar to assessments, the mechanisms for making referrals vary by type of provider and the nature of the provider-client contact. As mentioned, street outreach workers may have only a single, brief window for intervention, whereas case managers inherently have ongoing contacts with their clients. Street outreach workers may rely heavily on handing out cards that contain referral information. Some street outreach workers actually bring clients to agencies for services.

While outreach workers must fit the referral mechanism into a brief contact, other types of providers can use more time to make the referral during a client visit. Other mechanisms used included written, verbal, and facilitative, as well as combinations of all three. Some examples follow:

- **Complete a referral form in triplicate.** The referring agency, the destination agency and the client all receive a copy.
- **Personally accompany client to a referral.** A case manager reported that staff at her agency often accompany the client to a needed service, and this mechanism is most effective, since there is a better chance that clients will access the needed services.
- **Write down referral information for client.** While this method is less likely to result in a successful referral, it is a commonly used for mental health services. Clients may want to access mental health services on their own and/or mental health providers are often resistant to clients accessing services with another service provider present.

- **Make referrals verbally.** Individuals receiving anonymous HIV tests receive verbal referrals from both the pre- and post-test counselors.
- **Offer a toll-free line to provide referrals.** This mechanism allows a client to call, listen to menu options, and choose the type of referral s/he wants. This method is efficient and, for many services, sufficiently meets the need for referral information. On the other hand, this system excludes the provider-contact component of a referral-based intervention.

Referral Documentation

The consistency with which referrals are documented varies across agencies. Some service contexts are more conducive to documenting referrals. Also, it is often more practical to document a formal (or written) referral than an informal (or verbal) one. Overall, most providers report that their agencies have developed some version of an activity form on which they record the number of referrals provided and the type of service, the specific agency name, or both. Some providers identify the need to improve the documentation of referrals, and record referrals in places other than progress or case notes. One program is in the process of developing new forms for reporting interventions, which would include items about where the client was referred from and if a referral was made. This program is planning on conducting three to four month follow-ups with clients so that staff can document follow-through on referrals as well as other client progress.

Methods used to document referrals include:

- **Field notes/Activity reports.** Outreach workers keep field notes which they use to complete activity reports. The extent to which field notes are translated to activity forms may be limited.
- **Client charts and case notes.** Case managers, confidential testing counselors, and other providers, such as clinicians, keep charts on client activities and contacts. Referrals are documented in both the treatment plan and in the text of charted case notes. Referrals from case notes are often summarized on a monthly basis and/or recorded in a referral log.
- **Client contact forms or testing forms.** Anonymous test counselors document referrals by completing a testing form for each client. Space is designated to check off different types of referrals given. Counselors also document when a client declines the referral.
- **Database.** For organizations using computerized information systems to record information about clients, documenting and counting the numbers and types of referrals made is very efficient.

Data that led to development of the current City Clinic study on referral provision and follow-up also suggest that the extent to which referrals are documented by providers is quite

small. In 1994, publicly funded CTRPN providers were specifically asked to document the referrals they provided. Even after this request, referrals were documented for little more than one-quarter of the total clients seen.

Prevention providers in general are already stretched to meet the challenges of their work. Documenting the services and referrals they provide can be time-consuming. Many providers choose to use their time to serve more clients rather than to consistently document their work.

Referral Follow-up

The mechanisms for referral follow-up and follow-up rates vary depending upon the type of intervention and nature of client contact. Many providers reported that they have no formal mechanisms for following up on referrals they make. This does not mean, however, that no follow-up occurs. The possible follow-up depends mainly on the nature of the client-provider relationship. Referral scenarios fall into two categories. The first is a brief encounter with a client who is relatively unknown to the provider. The second is a referral made by a provider who has a relationship with a client. In the second case, referrals and follow-up are basic components of the treatment plan and are integral to the services provided. In one program where outreach workers' relationships with high-risk clients are critical to this population's accessing services, the provider reported that follow-up occurs when the worker encounters clients on the street. It was estimated that 90% of referrals were followed-up in this way.

Other examples of methods for referral follow-up are described below.

- Teen clinic staff follow up with clients about their referrals by telephone, or during subsequent contacts. Internal referrals can also be tracked with staff during case conferences.
- Volunteers may review a computer database and make follow-up telephone calls to clients who are given referrals.
- For youth services, a telephone call to the provider receiving the referral is usually made by the referring provider.
- Some providers use referrals cards to track referrals. Cards given to clients are collected at the destination agency and returned to the referring agency. Providers report mixed results for accurate tracking of referrals using this method.
- In cases such as anonymous testing, where tracking can be difficult, staff have called agencies that are commonly referred to and asked their staff to keep track of where their clients were referred from.
- Preliminary data from the current City Clinic study suggest that very few clients follow up on the referrals they received from a CTRPN provider. Of 34 people given outside

agency referrals, only three followed through and received the service. There are a variety of reasons for this. While some of these 34 did not agree to subsequent post-test counselor contact (thus excluding their information from the study), others who did agree said they either didn't recall receiving the referral, didn't attempt to follow through, or attempted but could not access the service to which they were referred. These results emphasize the fact that referral outcomes rely heavily on client willingness to follow through with the referral.

Incoming Referrals

Agencies have various mechanisms for receiving referrals made to their programs. As with outgoing referrals, these mechanisms tend to vary based on the type of service and range from informal to formal. The types of providers making referrals to prevention providers include hotlines, HIV testing sites, substance abuse treatment, health clinics, schools, the Department of Social Services, the Juvenile Probation Department.

Barriers to a Successful Referral

There are many barriers to a successful referral. The roots of these barriers lie in issues related to services or providers, clients themselves, or a combination of the client-provider relationship. The following lists these barriers as they group according to source.

Barriers Presented by Services or Providers

- **Lack of available services in general.** Many providers expressed concern that there are not available services. For example, most providers agreed that the lack of substance abuse treatment services and housing services for all client groups is appalling.
- **Lack of appropriate services in particular.** Especially for some specific target groups, there is a scarcity of available services serving their population. For example, a provider of youth services mentioned the lack of shelter services for runaway, homeless youth. A CTRPN provider expressed concern about referring clients who test positive to services that are not culturally and/or linguistically appropriate.
- **Lack of connection between providers.** If a client receives a referral, but no working relationship exists between the agencies, the referral is not likely to be successful. A referring provider must know the referred agency's eligibility requirements, capacity to receive new clients, and capacity to appropriately serve different client groups.
- **Lack of agency follow-through on publicly made commitments.** Sometimes a referral is made to a program that has publicly committed to making some improvements or changes in types of services, only to find that they are still ill-equipped to serve a referred client. This undermines the credibility of the referring agency.

- **Lack of user-friendly written referral information on available services.** People need good information to consult if they are going to access the services they need.
- **Lack of consistent provider training on and attitudes towards the referral process.** Some providers are better equipped than others to give referrals. Some providers more than others value the referral process, especially as it can benefit HIV-negative clients.
- **Conflicts with a client-centered approach.** A provider who believes a client should only receive the services s/he identifies is unlikely to extend information for services beyond those for which the client expresses interest.
- **Lack of agency capacity to receive new clients.** As one provider stated, *“People can’t get past the voicemail”* when making their initial contact with the referral agency. Long waiting lists present a tremendous barrier for making a complete and successful referral. Providers are stressed to meet the needs of all the clients that want their services.
- **Eligibility requirements exclude groups from receiving services at certain agencies.** This reality is usually based in funding restrictions.

Barriers Related to Client Issues

- **Some clients are not ready.** If the provider identifies a service need that the client is not yet ready to address, the client is unlikely to pursue the service.
- **Clients’ priorities may not value the service.** This is related to the above point. One provider stated, *“The provider needs to ensure that its target community sees a real benefit in accessing the service.”* Another provider felt that, *“It’s a real question of values, and whether clients think that they need therapy, prevention skills development, etc. They tend to know when they need housing, food, money, or some other basic form of support. A successful referral requires some buy-in from the client.”*

Barriers Related to the Client-Provider Contact

- **Difficulties in making the first step into a service system.** As one provider explained, “clients get cold feet” in terms of seeking a new service. It is easier if the client is already entrenched in a service system; breaking into a new system of services is harder. For example, a client coming from testing service may feel barriers to accessing a whole new system for the first time.
- **Some types of contact are not conducive to a successful referral.** For referrals provided over the phone, for example, the conversation is short and usually somewhat limited in terms of the provider’s ability to engage. Volunteers in one agency *“often get frustrated when they are talking to someone who is high-risk, but who thinks this behavior is acceptable. People sometimes just aren’t ready, especially regarding substance abuse.”*

IV. OTHER LINKAGES

In addition to relationships built around referral mechanisms for clients, there exists a whole network of other types of linkages among providers of HIV prevention and other types of services. These linkages are described as connections between agencies, either formally through funded collaborations, semi-formally through memorandums of understanding (MOUs) or informally through joint projects, networking, or other coordinating mechanisms. In a climate of limited resources, agencies can benefit from sharing materials, space and administrative costs, to name a few examples, as well as take advantage of the experience, knowledge and specialized services of staff at other agencies. This section describes interview findings related to these less formal linkages between agencies.

Current Linkages Among HIV Prevention and Other Providers

The types of connections agencies are involved in include special events planning, MOUs for referral mechanisms, shared facility space, shared materials, on-site services, shared referrals, trainings on cultural diversity, information sharing sessions, coalition memberships, and community building with agencies serving similar target populations.

Some specific examples of these linkages are described below. This is by no means an exhaustive list; rather, it highlights some of the many ways providers currently work together.

- **Special Events.** A common type of linkage involves agencies working together to plan special events such as fairs or conferences. This model relies on the idea that targeted communities have a variety of interests or concerns, apart from HIV, and would be more likely to attend an event that addresses a combination of issues. One example is offering HIV education at a resource fair on immigration issues.
- **Services Provided On-Site at Another Agency.** A second type of linkage involves a program providing services on-site at another agency. A primary goal of this model is expediting referrals and providing easy access to related services. This works particularly well for HIV testing services, which can provide anonymous testing and counseling at various sites such as primary care clinics or church support groups.
- **Provide Prevention to Clients of Another Agency.** An effective linking mechanism, as well as an efficient use of resources, is the practice of providing HIV prevention to clients from another agency. Many non-HIV related services agencies benefit from integrating an external HIV prevention component into their programs for people who are also at risk for HIV. Examples of the types of programs that have benefited from this type of relationship include youth groups from a teen clinic, support groups for Latina immigrants, clinic patients who receive HIV testing from another program.
- **Meetings Among Providers to Share Information.** Providers coming together to share information and ideas has been an important way that agencies can work together. This take a variety of forms, from very formal, regular meetings to informal information

sharing. Some examples of the focus provider meetings include youth issues, gay/bisexual and transgender issues, harm reduction in general, cultural and ethnic specific issues.

- **Shared Materials and Service Exchange.** Some providers describe formal agreements they have with other programs to share materials in exchange for services or training. This is another example of an efficient use of resources to benefit multiple programs.
- **Shared Referrals.** While all providers interviewed make referrals, only some have specific agreements or memorandums of understanding that outline each agency's willingness to refer clients to the other.

Barriers to Linkages Between Organizations

The primary barriers identified were in the areas of funding restrictions and agency staff. These are highlighted below.

Barriers Related to Funding Restrictions

- **Funding is too restrictive.** Targeted funding limits providers' ability to incorporate other activities, such as recreation, into their programming.
- **Units of service requirements are barriers to networking.** Providers can become "possessive" of their clients, especially if they serve a special population and have U.O.S. requirements or other contractual obligations regarding number of clients served can make providers possessive of their clients. This is especially true if they serve a special population.
- **Funding requirements and contractual obligations limit the ability to document referrals and linkages.** If referrals are not a part of a program's contract, the program has little incentive to document, count, or follow up on referrals.

Barriers Related to Agency Staff

- **Lack of time for staff was a common barrier to increased interagency linking.** Staff are often overloaded and operating in crisis mode.
- **Planning among agencies is difficult.** Different approaches to HIV prevention can hamper ongoing working relationships.
- **Lack of inclusion of all staff members in the planning process presents barriers to linkages.** Frequently agencies fail to include line staff in developing these relationships which can result in a lack of buy-in for the project.

V. LINKAGES AND REFERRALS WITH NON-HIV RELATED SERVICES

A small number of providers of mental health and substance abuse services also were interviewed to gain a sense of how these services link clients to HIV prevention.

The mental health provider interviewed reported that his program made all types of referrals based on client need. Clients receive referrals and follow-up as part of their mental health services. For HIV prevention, the program refers to a variety of HIV prevention providers for safer sex information, and to several clinics providing HIV testing. This provider reported that all interventions and referrals are documented in case notes. Follow-up on referrals depends on the staff relationship with the client: those not formally in treatment most likely do not receive follow-up on referrals outside the program.

A federally funded substance abuse services demonstration program provides a comprehensive assessment and referral system in a geographically centralized location. When asked about HIV prevention needs, staff indicate that there is a general assumption that any client with substance abuse issues is most likely at high risk for HIV. It is not common practice to refer clients directly to HIV prevention services. Because addressing HIV risk issues is a key component of substance abuse treatment programs.

VI. LINKAGES AND REFERRALS WITH HIV CARE AND TREATMENT SERVICES

Another critical connection both in terms of referrals and general service coordination is the relationships between HIV prevention and HIV/AIDS care and treatment providers. Two care providers were interviewed: one provider of primary health care (serving primarily Latina/o clients) and one provider of practical and emotional support.

For the provider of primary medical care, staff reported that HIV-positive clients are referred primarily from anonymous and confidential test sites. In addition, the clinic has anonymous testing on site. The anonymous testing counselor will often escort HIV-positive clients to the clinic and introduce them to staff to establish a relationship. Staff also reported that community outreach to other agencies, such as making presentations on the types of services available, is key to making their services known in the community. Of particular importance is making a personal contact with other providers. In this way, providers feel more comfortable making a referral to the clinic or program.

The provider of practical and emotional support to people with HIV and AIDS did not think that his program received referrals from prevention providers per se, except for those that conducted prevention in addition to other HIV services (e.g., medical care and other treatment for HIV). Most clients requesting services have known about their HIV status for a significant period of time. Thus, referrals would not be coming directly from testing sites or from people who have just recently been made aware of their serostatus.

However, referrals are given to clients of this program for needle exchange and for programs offering condoms and safer sex information. These referrals are generally made for

clients receiving comprehensive case management/case coordination services. As part of the intervention for clients, referrals are documented in case notes and may be followed up depending on the treatment plan for the client. Since making referrals is not a contract activity for this agency, there is no formal mechanism for documenting referrals and follow-up in a systematic way.

VII. SUGGESTIONS FROM THE FIELD

This section describes providers' suggestions for enhancing both referrals and linkages.

Suggestions to Enhance Referrals

- **Develop a comprehensive resource guide.** Many providers felt that a comprehensive listing of resources could be an invaluable tool for staff providing referrals to clients. Some felt that the HPPC does a good job of bringing the community together on a regular basis and should capitalize on this capacity. It was suggested that the HPPC may want to develop a comprehensive guide of services that could aid in referrals for HIV prevention providers.
- **Develop a system to track available services.** A few providers discussed the need for a centralized way to track available services. One suggestion was an online system that could inform providers about available space in treatment programs or shelters. The system should also be able to identify programs that have special services for specific populations, such as women. Another component of the system could be a centralized intake process that would allow for electronic linking to appropriate programs.
- **Improve provider communication and coordination for tracking clients.** Because many clients may have multiple case managers, service coordination could be improved if the case managers talked with each other. The first step toward establishing the service coordination is to conduct outreach to let programs know of each other's services. However, service coordination is not guaranteed by case managers talking to each other. Currently case conferences among providers from different agencies happen, but methods to reduce competition for clients must be developed. *"Case managers can get weird because of turf issues."*

Youth providers emphasized the importance of tracking individual youth so they don't fall through the cracks. Some providers discussed a computerized linkage system that would allow providers to track youth across agencies while ensuring confidentiality. Informants felt that this type of system would also help to minimize duplication of services.

- **Encourage involvement of staff at all levels in planning.** Providers indicate that it is critical that the benefits of working together are pointed out to program staff. It was recommended that inter-agency linkages should be developed with outreach workers, case managers, and other direct service staff in the room. In this way all staff can take

ownership of the process, feel an interest in the outcome, and be more likely to implement it.

- **Increase communication between providers about program development.** Providers expressed an interest in knowing about how other providers are progressing in terms of improving their cultural sensitivity or making other improvements to their programs. This may be the result of evaluations they have conducted and the changes they have implemented in response to evaluation findings.
- **Increase flexibility in funding and reporting requirements.** Providers felt that the Request for Proposals should encourage creativity in approaches to HIV prevention. One informant said, *“the HPPC should recommend flexibility in program designs, allowing connections and linkages to be built in to program designs.”* It was also felt that linkages should be funded; providers should be able to allot a certain number of service units or “slots” in their programs for the clients of agencies with whom they are supposed to link.
- **Provide incentives for working together.** Providers had a sense that some organizations should take responsibility for fostering communication between agencies and programs, that it is unreasonable to assume that providers will work together. Incentives are critical for this to happen as well.

Additional Linkages Needed

Providers were asked what additional linkages are needed to enhance HIV prevention. They responded both with how increased connections would help their own programs and where more connections in HIV prevention would be beneficial. Several themes emerged regarding gaps in the current system’s ability to meet the needs of the community.

- **Increase connections to non-HIV related services to ensure that comprehensive needs are met.** Many clients seen by prevention providers need additional services. Critical service needs include substance abuse and mental health services, as well as job training and job placement, primary health care, housing, public assistance, and other social services. Connections to other services are particularly pertinent for youth, especially relationships with the School District and the Department of Social Services.

HIV is a way to get a foot in the door. We are currently developing super Health Educators, who know about public assistance, substance abuse, mental health, housing.

- **Bring an HIV prevention component to programs serving populations that may be at risk for HIV.** For example, HIV prevention needs to be integrated into programs targeting youth such as social activities, sports events and activities, supportive services, and programs providing alternative activities for high-risk youth.

- **Increase links between HIV testing programs and other services.** HIV testing and counseling should be considered be a central hub, referring to and receiving referrals from a variety of HIV prevention, HIV care, and non-HIV related programs. Many cooperative programs are working or being developed among HIV testing providers and other services. This allows convenient access to HIV testing services for clients of these other programs while also offering immediate resources for testing clients. While this link is perhaps the strongest, those interviewed identified specific areas where this linkage still needs to happen. One suggestion was to develop a formal link between anonymous testing services and needle exchange programs. Having the testing program co-located with needle exchange would allow needle exchange clients easy access to counseling, testing, and risk assessment. Also mentioned was the need for a drop-in testing site in the Tenderloin. In general, the concept of having an on-site link with another program's services fosters the most comprehensive and easily accessible services. This involves having staff from different programs co-located while a service is being offered.
- **Increase relationships between HIV prevention and HIV care and treatment.** Programs offering support services to people with HIV and AIDS could benefit by outreach from prevention providers who have condom distribution and primary and secondary prevention as part of the their central mission. Care providers noted that education and prevention providers seemed to be especially interested in offering secondary prevention to individuals infected with HIV and often are looking for ways to reach these clients.

We have a database of 2,000 names. We could be including prevention information and materials on behalf of prevention programs in our newsletter. Our office sites could also be used for distribution of condoms and prevention literature.

- **Institute cross program training.** Consistent with the theme of addressing the complex needs and issues of many individuals at high risk for HIV, several providers felt that HIV prevention staff could benefit from training and information sharing from providers of specific kinds of services. For example, prevention providers could benefit from substance training addressing issues such as stages of abuse and harm reduction models of care treatment. Also identified was the need for training on mental health issues, not for diagnostic purposes, but to facilitate awareness among providers about how these issues relate to risk for HIV.
- **Form special interest coalitions.** Several providers identified the need for more forums for communication, coordination, information sharing, and linking among agencies serving a particular community or providing a specific service. Some examples include a coalition for agencies serving Latina/os and a group for substance abuse treatment programs.

- **Build relationships to increase capacity for cultural diversity and cultural sensitivity.** Some providers identified a need to build and strengthen their connections with programs that would allow them to expand their target populations to reach people of color. Organizations serving a predominantly White population could benefit from working with agencies serving various ethnic communities to better understand how to reach people in those communities and develop interventions appropriate and sensitive to cultural norms.

VIII. THEMES

Several themes emerged during discussions with providers. For the most part, these issues have been noted in other sections, either as barriers or as factors that can contribute to improved referrals and linkages. These issues need to be taken into consideration when thinking about how to improve referrals and foster productive links among service providers.

Lack of Available Resources

In general, providers reported that fewer resources are available for the HIV-negative client. Many services exist to aid those with HIV disease, and in many cases the funding for these services is restricted to serving people with HIV. The problem of limited resources is two-pronged. First is the issue of a lack of available services in general. In all areas of health and social services, resources are limited and services are not always available for everyone in need.

The second issue addresses the fact that on the whole, the system of HIV prevention may not be thinking about the many needs of HIV-negative individuals. One provider noted that the current philosophy for serving people with HIV and AIDS has evolved to a model of addressing the full spectrum of needs of these individuals. This involves looking at the “whole person” and addressing housing, economic, substance abuse, mental health, and other needs. It is critical for the prevention of HIV to employ a similar perspective for those at risk for becoming HIV-infected. In particular, services that providers felt were lacking were shelter services for youth, employment and training opportunities, TB control, and violence prevention programs that work. The importance of providers’ documenting these and other service gaps as they try to meet their clients’ needs is crucial to demonstrating the effect of gaps on HIV prevention services.

Provider Involvement = Successful Referral

A personal approach is critical for making a successful referral.

A referral is more likely to be successful when the provider is able to accompany the client to the referral agency and make the connection on the spot. Other important elements of this facilitated effort are making an initial appointment and assistance with intake and/or enrollment.

The personal approach, however, is not only between the provider and client. Personal connections between staff at referring agencies is very important for making successful referrals. The provider who knows someone at the agency can be more confident about the quality of referral and its appropriateness for the client. This personal knowledge and familiarity between staff of the two agencies can also make the client more comfortable when entering a new environment.

Role of Substance Abuse in HIV Prevention

Prevention providers need to have a clear awareness and understanding of the role that substance abuse plays in the lives of high-risk clients. This is essential in developing a continuum of care for these clients.

There needs to be an acknowledgment of the seriousness of this issue. Prevention staff need to be able to deal with this with clients during the time they are waiting for space to open up at treatment programs.

HIV prevention providers may shy away from getting involved in substance abuse issues/counseling. A lack of knowledge or sufficient training on how to address substance use directly with clients can be limiting for some providers.

HIV Testing as a Pivotal Point for Referrals

The pivotal role of HIV testing in linking clients to needed services cannot be stressed enough. This is the point when clients who test positive for HIV can be connected to early intervention, care, and treatment services. For individuals testing negative, the testing intervention provides a tremendous opportunity to assess need and link clients to other services, be they specific HIV prevention services or any of a number of services that address the immediate concerns of an individual. These may include substance abuse, housing, income assistance, health care, or mental health needs, that may in fact, be putting this person at greater risk for contracting HIV.

IX. HPPC RECOMMENDATIONS FOR REFERRALS AND LINKAGES

The Linkages Committee of the HPPC was charged with developing recommendations for referrals and linkages in HIV prevention in San Francisco. The recommendations presented here are based on the information summarized in the previous sections. Committee members spent several meetings brainstorming ideas for recommendations and then formulating and fine-tuning their final recommendations. The Committee received feedback from the HPPC at the time of its approval in concept at a Council meeting in August. The final recommendations, adopted by the full Council in November 1996, are presented below.

Referral Resources (Knowledge of Services)

Providers:

- a. All providers (anonymous and confidential CTRPN, primary prevention, hotline) need to become aware of all services available, particularly those outside the HIV prevention community.
- b. Providers should be encouraged to engage in informal information sharing to build knowledge about referral resources and ensure that referrals are appropriate for clients. Examples of information sharing include: offering inservice trainings and conducting community outreach at other programs; inviting other program staff to make presentations about their services; provide appropriate training and orientation to new staff about referral resources; hold regular staff meetings to share information among staff members.
- c. Include substance abuse and mental health services among referral resources.
- d. Encourage line staff to attend meetings convened by the AIDS Office for the purpose of building knowledge of resources.
- e. Document when unable to access services for a client.
- f. All CTRPN and hotline providers must be aware of all types of services available for both HIV-negative *and* HIV-positive clients.
- g. All HIV prevention providers must be aware of an entry point to services for HIV positive clients.

AIDS Office:

- a. Develop a comprehensive resource guide including online services that can be regularly updated.
- b. Convene regular meetings that provide opportunities for HIV prevention providers to learn about other prevention programs as well as other types of programs and services. These meetings must include careful planning and evaluation, and be responsive to needs identified by providers. Examples of the types of meetings include 1) twice yearly meetings where all prevention providers share information about their programs; and 2) topic specific meetings targeting providers of different types of interventions.
- c. Investigate designating and putting into contracts the time providers spend networking and building resource lists as units of service.

Relationships between agencies who refer clients to one another (or just one-way referrals)

Providers:

- a. Establish clear separation of roles when clients are referred from one agency to another to avoid duplication of services (i.e., be clear about who will manage which services of the case that is being referred).
- b. In program contracts, list the primary referral resources they expect to use.
- c. Encourage personal contacts between staff at referring agencies.
- d. Agencies serving youth should build communication and referral mechanisms with San Francisco Unified School District programs and clinics so that each may refer to one another.

AIDS Office:

- a. Facilitate building connections between agencies serving youth and the San Francisco Unified School District programs and clinics so that each may refer to one another.
- b. Facilitate the development of connections between other City agencies (mental health, substance abuse, other public services) to develop strong referral systems with one another and with HIV prevention providers.

See also recommendations b. and c. for the AIDS Office from Section 1 above.

Development and Implementation of Referral Tracking System/Mechanism

AIDS Office/Providers:

- a. Coordinated by the AIDS Office, with direct input and participation by providers (including line staff), develop a system to track referral outcomes for the purpose of evaluating the effectiveness of referrals by city funded HIV prevention providers including anonymous and confidential CTRPN providers. Components of this tracking system should include:
 - i. The assurance of confidentiality for clients.
 - ii. Standardized forms for documenting referrals (specific to intervention type, e.g., case managers, street outreach, counseling and testing, clinical settings). Documented information should also include, at a minimum, the standardized demographic variables and risk behavior information, for the purpose of analysis.
 - iii. A mechanism for providers to collect information on a regular basis about where their clients were referred from. Agreements need to be established with other programs to receive reports back on the number of referrals one agency receives from another agency. This will allow agencies to track and evaluate referrals.
 - iv. Quality assurance mechanism to monitor: the acceptability and appropriateness of referrals; referral related agreements between agencies; grievance procedures for agency noncompliance with agreements or provision of inappropriate services to clients.
 - v. Investigate the feasibility of developing and implementing a centralized computer database system for tracking referrals. The use of unique identifiers for clients should be included to ensure confidentiality of clients.
 - vi. Designate contract time for referral system planning and development.
- b. Allow providers to report evaluation of referrals as part of the strategic evaluation units of service.

Ways to Ensure Success of a Referral

Providers:

- a. When possible, become actively involved in the success of a referral (assist with transportation, accompany client, make the phone call in client's presence, etc.)
- b. Establish a point person at each agency as the main resource person (i.e. a contact for referring agencies or a main referring staff person).
- c. Make a personal contact at the destination agency to help the client feel more comfortable following through with the referral.

AIDS Office:

- a. Explore mechanisms to support providers in following through on a, b, and c above.

HPPC:

- a. With input from providers, consider whether the "Client Centered Counseling" model acts as a barrier to providing needed referrals, and develop guidelines for each intervention type outlining how and when this method is or is not appropriate for assessing client needs and making referrals.

Additional Linkages

Providers:

- a. Develop special interest coalitions among providers serving similar populations.
- b. Establish/strengthen relationships between providers of services to specific populations such as youth (including SFUSD), women, etc. for the purpose of developing stronger referral mechanisms, maximizing resources, reducing duplication of services, and providing more comprehensive, continuous care.
- c. Establish/strengthen relationships between providers serving the same cultural groups for the purpose of developing stronger referral mechanisms, maximizing resources, reducing duplication of services, and providing more comprehensive, continuous care.
- d. Explore how primary and secondary HIV prevention providers can work together to provide appropriate HIV prevention to people infected with HIV.
- e. Establish more co-located services (e.g. needle exchange and HIV testing).
- f. Create cooperative relationships where a staff person from one agency is on site at another agency to facilitate referrals or other linkages for clients, and provide additional expertise or assistance for staff.
- g. Engage in expanded organizational outreach where workers go on-site to other programs to introduce their services to clients of these programs.
- h. Encourage cross program training and linkages with agencies providing continuing education of HIV prevention staff.
- i. Develop awareness/connections with non-AIDS Office funded HIV prevention efforts to facilitate coordination, fill gaps, and avoid duplication of services.

AIDS Office/HPPC:

- a. Sponsor meetings of special interest coalitions so that providers serving similar populations can refer to each other as appropriate.
- b. Develop a centralized calendar of HIV prevention related events to avoid conflicts in scheduling and provide information about upcoming opportunities.

X. COLLABORATIONS IN HIV PREVENTION

An additional task of the Linkages and Coordination Committee was to generate a list of requirements for formal collaborations, should agencies request funding for a collaborative project in response to the 1996 Request for Proposals. The process for developing these elements began with Committee members' reviewing background information on collaborations presented by AIDS Office staff and the technical consultant.

The Committee received a preliminary report on an evaluation of AIDS Office funded collaborations. This study looked at effectiveness of the collaboration model for providing HIV prevention services. Barriers and weaknesses to working together as a collaboration were presented, as well as the strengths and successes of these collaborations. The Committee also reviewed information from the literature on collaborations. Based on this input, the Committee formulated a definition of collaboration and a list of the required elements of a collaboration. The HPPC adopted these recommendations in May 1996. This set of requirements became a component of the 1996 Requests for Proposals issued by the AIDS Office. Any agencies requesting funding as a collaboration were required to incorporate these elements into the design and presentation of their proposed collaboration.

Required Elements of Proposed Collaborations

Many definitions of collaboration as a model for service delivery appear in the literature. The following best describe our vision of collaborations formed for the purpose of HIV prevention.

“Collaboration is a mutually beneficial and well-defined relationship entered into by two or more organizations to achieve common goals. The relationship includes: commitment to mutual relationships and goals; a jointly developed structure and shared responsibility; mutual authority and accountability for success; and sharing of resources and rewards.”

Peterson, A.H. Wilder Foundation.

“Collaboration builds on the conviction that, while retaining uniqueness and autonomy, organizations that share values and goals can accomplish more by working together than working alone.”

*Community Collaboration Manual, National
Voluntary Health and Social Welfare Organization*

To expand on these definitions from the field, the foundation of a collaboration must be structured such that each agency retains its own independence, governance, identity, and uniqueness. No single agency should have the power to determine what the program(s) of the collaboration shall be. Similarly, the fiscal agent's role should not include management of any of the individual agency's programs or organizational structure.

Given these definitions and guidelines for the basic structure of collaborations, the following represents the essential elements that proposed collaborations must describe for the 1996 RFP.

1. **Clearly define the *common goal of the collaborating partners*.** An essential element of a collaboration is that all the partners or agencies involved share a vision, mission, or goal that brings them together. This does not mean that each partner has the same agency mission, but instead refers to the shared goal that defines the collaboration, or explains the reason for coming together. This also insures that all partners, through their participation in the collaboration, are working toward the same end, that they are coming together for the purpose of accomplishing this shared goal.
2. **Outline collaboration goals and objectives (including outcome objectives).** While any program responding to the RFP would be required to state its goals and objectives, we have included this here to emphasize that the collaborative program must have its own goals and objectives, and these would be different from the existing goals and objectives of each individual partner.
3. **Define *shared units of services* for the collaboration and each partner's contribution to these units of services. Also include the collaboration's procedures for addressing noncompliance among its partners in terms of these commitments.** Shared units of service refers to the idea that a collaborative program should express the units of service provided in terms of what is provided by the collaboration as a whole. For instance a collaboration providing outreach services would indicate how many units of community outreach the collaboration as a whole will provide; these would be the shared units of service. Within that, the proposal would also need to indicate how many or what proportion of these shared units of service would be provided by Partner A, how many by Partner B, etc; these would be the partners' contributions. The point of this is to get a clear picture of the units of service for which funding to this collaboration would be paying.
4. **Clearly define the roles and responsibilities of each collaborator/partner including the fiscal agent and the programmatic lead (if different).** This refers to what each partner contributes to the collaboration as well as any specific roles that would be assumed by the partners. In particular the role of the fiscal agent must be defined: Who would this be? What does being the fiscal agent mean in terms of responsibility and the relationship to the other partners? If the partner who takes a lead in terms of the program implementation is different from the fiscal agent, this role also needs to be defined.

5. **Describe the commitment of each partner and the programmatic benefits for each partner.** This is the place where the proposal can articulate why the collaboration is in the interest of each of the agencies involved. Benefits should include more than just an opportunity to get funding. Benefits may include sharing expertise, resources, facilities, etc. so that an individual agency can feel like it is increasing its capacity to provide quality services.
6. **Describe how services will be enhanced through the collaboration (e.g., increased quality, increased variety in types of service, decreased barriers to access, increased number of people served, decreased costs, shared expertise).** This statement is meant to be a justification for collaborating and an answer to the question “Why is your collaboration the best method for providing this service?” This is the crux of the recommendations for collaborations. Given the inconclusiveness of the AIDS Office’s evaluation of whether a collaborative effort represents a more effective use of resources, agencies applying for funds as a collaboration must explain why their collaboration is a good idea. They need to answer the question: How will the collaborating organizations accomplish more by working together than they can by working alone?
7. **Describe how each partner will have input into the decision making process of the collaboration.** This refers to the relationship between the collaborating partners and the mechanism used to make decisions for the collaboration. It is important that all of the collaborating organizations must take part in this.
8. **Describe a plan for developing policies and procedures for the collaboration, such as leadership roles, facilitation mechanisms, conflict resolution and mediation mechanisms, grievance policies, lines of communication, problem solving and decision making procedures, and methods of accountability.** This plan may include the number and frequency of partner meetings and how they are facilitated. This is actually an elaboration and expansion of #7 above, recommending not that collaborations outline their policies and procedures, but instead explain the mechanism they will use to develop the details of the organizational structure of their collaboration.
9. **Describe the anticipated challenges to collaborating, including non-compliance of one or more partners, and how the collaboration plans to address these challenges.** Organizations should acknowledge and identify potential difficulties to collaborating, and again describe their mechanisms for overcoming challenges.
10. **Describe a plan to evaluate the collaboration as a process.** This could include measures such as:
 - Were working relationships successful?
 - Were there clear lines of communication between partners?
 - How did the collaboration meet each partner’s expectations?
 - Did each partner feel it had equal input into the collaborative process?

Did each partner fulfill its commitment to the collaboration? (Is everyone pulling their weight as promised?)

This evaluation plan is in addition to the program evaluation component that would be required for any program. This refers specifically to an evaluation of the collaboration in terms of how the participating organizations work together.

11. **Describe the collaboration's relationship to the AIDS Office. Will each partner communicate directly with the AIDS Office or will one partner be the AO liaison?**
How the collaboration will communicate with the AIDS office needs to be clearly articulated. This recommendation came out of AIDS Office's study where it was found that the mechanisms for communicating were often unclear.

XI. CONCLUSION

The work of the Linkages Committee during 1996 focused on investigating the many ways that providers in HIV prevention relate to each other and to other types of service providers, the effect that these relationships have on service delivery, and where to direct efforts to improve overall linkages. The two main areas the Committee addressed were 1) Referrals and Linkages and 2) Collaborations.

Information from the field of providers in HIV prevention and other services offered an overview of referral systems and existing linkages. The Linkages Committee then identified several areas in which to make recommendations. The first area focuses on strengthening providers' knowledge of referral resources. Some specific ways to improve this include developing centralized and updated lists for referral resources; making sure that prevention providers (especially CTRPN) are aware of the full range of resources available to address clients' multiple issues; and emphasizing that CTRPN providers should be able to provide referrals for the needs of HIV-positive (for health care and other services) and HIV-negative (for prevention and other non-HIV related services).

The Committee also believes it is important to reinforce some of the points made by providers who identified ways to strengthen referral mechanisms. These are reflected in the recommendations regarding the relationships between agencies, which call for clarifying services roles for individual clients, encouraging personal contacts, and building better connections between all kinds of programs serving youth. The role of the AIDS Office becomes one of facilitator and support for providers to establish and maintain these connections. The Committee also saw a need for developing a referral tracking system to allow for follow-up on referral outcomes. This recommendation was formulated in response to the general lack of knowledge around the success of referrals. Recommendations regarding other types of linkages call for increased efforts to link providers serving similar populations or providers who can benefit from sharing information on similar issues. The theme of co-location of services and providers sharing expertise and training opportunities is also emphasized in the recommendations.

In its guidelines for collaborations, the Linkages Committee focused primarily on the idea of clarifying roles and responsibilities, both among collaboration participants and in their relationship with the AIDS Office. In asking future collaborations to clearly delineate their goals and processes as they form their collaboration, it is hoped that some of the pitfalls or weaknesses of past collaborations can be avoided.

A final piece related to linkages and coordination in HIV prevention is the issue of consistent prevention messages delivered by HIV prevention providers in San Francisco. While addressing this issue was initially thought to be a task of the Linkages Committee, thus far the Council has not brought it to the forefront for action. As stated in HPPC Goals and Objectives for 1997, developing mechanisms to ensure consistent prevention messages across all HIV providers will become a task for this year.

CHAPTER 9: STRATEGIC EVALUATION/DATA COLLECTION PLAN

I. INTRODUCTION

Overview of the Chapter

This chapter describes the five-year strategic evaluation/data collection plan adopted by the San Francisco HIV Prevention Planning Council (HPPC), and discusses its implications for San Francisco HIV prevention efforts. The chapter is divided into five major sections:

- I. Introduction
- II. Prevention Provider Level
- III. Intervention Research Level
- IV. Population-Based Prevention Surveillance level
- V. Background and Methods

Section I includes the chapter overview, and the evaluation philosophy that guided the Evaluation and Technical Assistance Committee's work in developing the strategic evaluation/data collection plan. Section II, the Prevention Provider Level, describes the Council's evaluation and data collection expectations for agencies providing prevention services over the next five years. Section III, the Intervention Research Level, includes a five-year plan for experimental and quasi-experimental research efforts, designed to measure intervention effectiveness, that go beyond the scope of prevention providers. The priorities for the Intervention Research Level will presumably be determined by the HPPC and carried out by the AIDS Office and independent research organizations. The Population-based Prevention Surveillance Level, Section IV, outlines a five-year plan for evaluating the cumulative effect of all prevention efforts by measuring population-based trends in HIV and HIV-related co-factors. The evaluation expectations for this level will largely be the responsibility of the AIDS Office. Section V describes the background and methods used by the committee in developing the strategic evaluation/data collection plan.

Strategic Evaluation/Data Collection Philosophy

The evaluation/data collection plan is defined as strategic because it has goals and objectives, a timeline, and a clearly articulated strategy for reaching these goals. This plan is designed to provide a blueprint for ongoing evaluation efforts over the next five years, and acknowledges and supports all levels of evaluation. However, the committee focused a great deal of attention on the Prevention Provider Level to make sure that prevention providers received clear direction regarding evaluation expectations, and access to the resources needed to help them increase their program planning, implementation, and evaluation capacities.

In developing the strategic evaluation/data collection plan, the Evaluation and Technical Assistance Committee of the HPPC felt it was important to work from an agreed-upon framework or philosophy from which they could develop an ethical, feasible, and appropriate strategic evaluation/data collection plan. This philosophy or framework also ensures that during implementation, the strategic evaluation/data collection plan would not stray from the intentions that determined its design.

Underlying the HPPC five-year commitment to evaluation are four assumptions about its benefits to individual programs, as well as to the prevention system as a whole.

- **Evaluation is a critical tool in reducing the transmission of HIV.** Until a universally effective cure becomes available for every person with HIV, prevention constitutes a critical tool in ending the epidemic. The purpose of undertaking intensive Prevention Provider Level impact evaluation (as well as Intervention Research Level and Population-Based Prevention Surveillance Level evaluation) is to measure prevention program effectiveness, and to obtain the information needed to stop the transmission of HIV in San Francisco. The HPPC believes that dependence on prevention brings with it an ethical responsibility to demonstrate that funded prevention programs can effect behavior change and therefore reduce the spread of HIV among the recipients of prevention interventions.
- **Evaluation data improve prevention planning.** In an era of dwindling resources, the HPPC and the AIDS Office must become increasingly selective about how, and to whom, resources are allocated; evaluation can play an important role in this decision making process. Good evaluation produces information about needs, service use patterns, impacts, and outcomes. A reliable description of the past and present frequencies of HIV-related risk behaviors in San Francisco populations can play a powerful role in planning for the future of HIV prevention. The planning process is only as good as the data it has to use.
- **Evaluation gives a voice to service users.** Collecting information from those affected by a service allows their perceptions and experiences to be heard by prevention providers, policy makers, and funders. Good evaluation reflects and amplifies those voices, so that services can continually adjust to the needs and preferences of consumers.
- **Evaluation improves program management.** By informing front-line workers and agency managers of the results of what they do, evaluation helps prevention providers learn how to enhance their performance. Good information is necessary to good management. This feedback loop allows prevention providers to put their efforts into what they do best—implementing interventions that ultimately reduce the spread of HIV.

The HPPC and AIDS Office see San Francisco prevention providers as full partners in the creation of a multi-level system of program and community evaluation which is:

- **Supportive:** The HPPC and the AIDS Office will provide the resources and the technical assistance to help prevention providers develop their data collection and evaluation skills. Initially, prevention providers will not be penalized for imperfect performance on evaluation requirements, or for a lack of evaluation skill. The minimum standards for evaluation will be raised gradually. Prevention providers will be given time and technical assistance to identify their areas of need and to develop their capacity for program planning, implementation, and evaluation—before their performance and utilization of evaluation affect decisions about their funding.

Prevention providers will also be asked to support the activities of the HPPC and the AIDS Office in planning and conducting Intervention Research Level and Population-Based Prevention Surveillance Level evaluation research. Meetings to present data will involve local prevention providers, and will serve as opportunities for the prevention community to receive updates on research findings and interpretations, and to give input into the directions and priorities of ongoing or future studies.

- **Accountable:** The strategic evaluation/data collection plan requires a relationship of mutual accountability and cooperation between the AIDS Office, other research agencies, San Francisco prevention providers, the HPPC, and the consultants contracted to provide technical assistance in capacity-building. Each of these parties is expected to share findings, uphold new standards and priorities, respond to feedback, and generally work to increase the effectiveness of the prevention system as a whole.
- **Creative:** While credible evaluation designs must be used, prevention providers will be able to develop their own innovative ideas about how to make evaluation work in their agencies. For their part, the HPPC, the AIDS Office, and other research agencies will be asked to examine gaps in current evaluation information and test innovative methods of collecting needed data.
- **Community and consumer-centered:** The HPPC recognizes that community involvement in setting evaluation goals and objective, and assessing how and to what extent these objectives are achieved, is critical to the success of the strategic evaluation plan. Input from the HPPC and from the broader prevention community will be integrated into all levels of prevention evaluation.
- **Based on behavioral science:** The evaluation models developed jointly by the prevention providers, the AIDS Office, and other research groups should be based on credible behavioral science theory and research. (See Chapter 4 - Strategies and Interventions, section on “Behavior Theory and HIV Prevention.”)

II. PREVENTION PROVIDER LEVEL

Guided by the HPPC, the AIDS Office has begun to require prevention providers to document, in their prevention proposals, the HIV risk behaviors of their target populations. The 1997 Request For Proposals (RFP) process illustrated the advantage of having current, valid, and

reliable risk behavior data on the populations a program aims to reach. Many prevention providers are starting to find that their own programs are the only reliable source for such data. Developing a strong data collection and evaluation system is not only a priority of the San Francisco HPPC. Many federal funders are already shifting toward making their support contingent upon the ability of programs to demonstrate measurable change in the risk behaviors of their target populations. While the CDC does not yet require HIV prevention programs to demonstrate behavior change, other funders do, and federal requirements are clearly on the horizon. Rather than waiting for mandated prevention impact measures from the state or federal funding agencies, the HPPC has been proactive in responding to emerging trends.

Starting in 1997, all prevention providers will be expected to develop, conduct, and report on a Behavioral Risk Assessment. The Behavioral Risk Assessment will require prevention providers to document the presence of HIV-transmitting behaviors among the populations they serve. Unlike a needs assessment, the Behavioral Risk Assessment will only measure risk behavior, and will be restricted to those individuals reached by the agency, rather than extending to the larger community from which they come. This assessment will provide important planning information for the HPPC, help the agency focus its efforts where the risk of HIV is highest, and develop the agency's skill in collecting, analyzing, and reporting on behavioral data. By Year Three (1999), prevention providers will be expected to incorporate the Behavioral Risk Assessment variables into an impact evaluation design to measure program effectiveness. In Years Four and Five, prevention providers will be expected to continue measuring program impact and adjusting their programs in response to evaluation results. Funding for Prevention Provider Level evaluation will come through the AIDS Office from CDC Cooperative Agreements, City and County General Fund, and California State grants, e.g., Department of Health Services. Technical assistance will be provided to assist agencies in meeting the Prevention Provider Level expectations.

Behavioral Risk Assessment Sample Size

The Behavioral Risk Assessment must be conducted annually on a minimum of 100 clients, or 20% of an agency's total client population (whichever is more feasible). With assistance from its AIDS Office program manager and primary technical assistance consultant, each agency will develop a specific sampling plan (determining the method of selection of clients to be included in the Behavioral Risk Assessment) early in the first quarter of the contract year. The committee encourages agencies to conduct the Behavioral Risk Assessment with a minimum of 100 clients, because this sample size will increase the value of the data to that agency, especially if that agency serves a population on which there is little or no current risk behavior data available.

Standard Variables

The Behavioral Risk Assessment addresses both sexual and injection behavioral risk, and requires prevention providers to ask their clients: 1) whether they have engaged in a particular behavior; 2) if so, how often; and 3) whether they used appropriate protection to reduce their risk of HIV. The Behavioral Risk Assessment variables have been standardized, and should be

used in their entirety (see Attachment 1 at the end of this chapter for a list of the required risk behavior variables). The HPPC recognizes that agencies may also need to adapt the language used in the Behavioral Risk Assessment to fit their particular client populations; suggested question formats are listed in Attachment 2.

The Behavioral Risk Assessment must also include seven standard sociodemographic variables that have been approved by the HPPC (see Attachment 3 at the end of this chapter for a list of the standard sociodemographic variables and response categories). In addition to the seven required sociodemographic variables, there is a list of *optional* sociodemographic variables. Collection of the optional items is not required. However, should prevention providers elect to collect data on any of the variables on the optional list, those variables should be appropriate to the client population, and should be collected in a standardized way; the questions and the response categories should mirror those found on the optional list (Attachment 4). Providers may also seek to ask questions and collect data relevant to their specific populations that are not found on the optional list.

Reasonable and Graduated Expectations

The HPPC intends to assist all prevention providers in incorporating risk behavior measurement and evaluation into their program designs. To support prevention providers, the AIDS Office and the HPPC will provide training and capacity-building in the areas of program planning, implementation, and evaluation. These efforts will include technical help with developing measurement tools and data analysis. The HPPC does not expect every prevention provider to become a research scientist. Nor is there an expectation that community-based organizations will be responsible for collecting surveillance data or conducting experimental or quasi-experimental research. Too often, overly elaborate designs at the Prevention Provider Level lead to frustration rather than insight. The strategic evaluation/data collection plan emphasizes what is realistic and meaningful to prevention providers, since they are the first audience for risk behavior and program impact information.

Individual approaches to evaluation will be determined by the agencies, in conference with their AIDS Office program managers and their assigned consultants for organizational development and technical assistance. Prevention providers will be supported in collecting data that they can use, and will be allowed to use formats for data collection that best suit their populations, interventions, and existing instruments.

The Evaluation and Technical Assistance Committee spent a great deal of time discussing the types of data that would be reasonable and feasible for prevention providers to begin collecting, as they build the proficiency needed to compete in a situation in which evaluation capacity and results will come to bear more heavily on funding decisions. Recognizing both the need to prepare prevention programs for the future and the need to create expectations that would not overshadow the demands of service provision and put an unfair burden on agencies, the committee worked on a practical, incremental, and inclusive approach to Prevention Provider Level evaluation. For the first two years, prevention providers will largely be responsible for administering a Behavioral Risk Assessment, (with the standard

sociodemographic variables) and reporting on their findings. The skills development and technical assistance provided will allow for the gradual enhancement of prevention provider capacity, with the expectation that prevention providers will be conducting impact level evaluations in Year Three.

Costs and Benefits

In an attempt to compensate prevention providers for their efforts to meet the new expectations for data collection, analysis, and reporting, the HPPC and AIDS Office have created a compensation mechanism for the delivery of evaluation efforts. Each prevention program may spend from 5-20% of its total contracted units of service on evaluation activities, and may bill these units of service monthly, as long as they submit documentation that they are meeting the timeline for proposed activities (see Attachment 4 at the end of this chapter for the suggested timeline). The units of service have been expanded to reflect the AIDS Office and HPPC understanding that evaluation is essential to the development of effective prevention services, and that agencies will have to reconfigure to perform evaluation tasks and organize services according to the HPPC priorities. To the extent that the demands of evaluation compete with the demands of clients, the new requirements may at first seem to detract from prevention providers' ability to serve their clients. However, evaluation activities should help prevention providers focus on the quality, and not just the quantity, of services delivered. In the long run, the resources consumed in building prevention provider capacity to conduct proficient program evaluation should be outweighed by the more effective use of prevention resources, due to the utilization of evaluation findings. It is with this belief that the AIDS Office and HPPC have designated significant resources for providing technical assistance to building prevention provider capacity in planning, implementation, and evaluation.

Guiding Principles at the Prevention Provider Level

The guiding principles for the Prevention Provider Level of evaluation are:

- 1) Impact evaluation efforts at the Prevention Provider Level should focus on accurately implementing the Behavioral Risk Assessment, measuring change in behavioral risk over time, and assessing program impact on that change. Prevention providers will be expected to focus on developing practical and realistic impact level evaluations, rather than limiting their efforts to process evaluation.
- 2) The purpose of Prevention Provider Level evaluation is to add to the cumulative knowledge about what works and with whom, and generally to strengthen the San Francisco system of available HIV prevention services.
- 3) An annual Behavioral Risk Assessment, required of all prevention providers, carries with it the understanding that it may take up to two years for all prevention providers to refine their skills in conducting the assessment. Technical assistance will be available to help prevention providers develop the necessary skills for implementation and analysis.

- 4) Data that is collected is to be used to improve and enhance prevention efforts, and technical assistance will be available to prevention providers to help them make programmatic use of this data.
- 5) All levels of programmatic staff and consumers should be involved in the development of data collection instruments and evaluation design, to ensure that the instruments and evaluation design are realistic and appropriate for the client population.
- 6) While incremental change in developing data collection and evaluation expertise is expected, minimum standards will be set and programs will be expected to meet those standards and timelines.
- 7) Cultural competency is a critical element in Prevention Provider Level evaluation. San Francisco is fortunate to have a great deal of cultural and ethnic diversity. However, this level of diversity requires that everyone working in the prevention system be respectful of cultural differences, and that evaluation tools and instruments reflect a high level of cultural competency.
- 8) Client confidentiality is of paramount importance. Client confidentiality, particularly around HIV status, shall be protected at all costs, and that state laws protecting HIV-infected persons shall be closely followed.

Prevention Provider Level Objectives

As mentioned earlier, the committee developed five-year objectives for each level of evaluation. The strategic evaluation/data collection plan has been developed to help programs succeed in their efforts to design, implement, and evaluate their programs. It is understood that, during the first three years of the five-year plan, prevention providers will receive high levels of technical assistance to help them develop the skills needed to conduct good impact level evaluation. However, by the year 2000, programs should have become proficient in administering the Behavioral Risk Assessment on an annual basis, should have incorporated the assessment variables into a “before” and “after” impact evaluation design, and should be conducting annual ongoing impact level evaluations. Beginning in 1997, the evaluation objectives are as follows:

1997 - In Year One of the five-year plan, the emphasis for prevention providers is on implementing an annual Behavioral Risk Assessment with a minimum of 100 clients, or 20% of an agency's total client population, whichever is smaller. The risk assessment is to incorporate a standard set of sociodemographic variables, as well as standardized measures of HIV-related risk behaviors. It is also anticipated that in Year One (1997) prevention providers will come together to share their experiences regarding administration of the Behavioral Risk Assessment, as well as its findings, with other prevention providers and the community as a whole.

By December 31, 1997, all AIDS Office-funded HIV prevention providers will...

- 1) Work closely with their technical assistance consultant and AIDS Office program manager to refine the skills needed to conduct a proficient Behavioral Risk Assessment;
- 2) Pilot, analyze, and report on a Behavioral Risk Assessment (including the HPPC approved standard demographics and risk behavior variables) administered to a minimum of 100 clients, or 20% of an agency's total client population, depending on which is more feasible;
- 3) Describe the HIV-related risk behaviors of the clients surveyed;
- 4) Cooperate in a city-wide review of the new Behavioral Risk Assessment process, and share their experiences and ideas.
- 5) Participate in technical assistance training on developing impact evaluation designs.

1998 - In Year Two, prevention providers are expected to have become proficient in Behavioral Risk Assessment data collection, analysis, and reporting which will include descriptions of the relevance of findings for programs. Prevention providers will be expected to participate in training on designing impact evaluations for their programs. Finally, prevention providers are expected to participate in efforts to share behavioral risk data with local audiences, and to contribute their ideas and expertise with regard to methods for administering the Behavioral Risk Assessment.

By December 31, 1998, all AIDS Office-funded HIV prevention providers will...

- 1) Work on continuing to improve the Behavioral Risk Assessment tool and methods for administering it;
- 2) Conduct proficient Behavioral Risk Assessments with their client populations;
- 3) Analyze and describe their Behavioral Risk Assessment data;
- 4) Describe the implications of their Behavioral Risk Assessment data for their programs;
- 5) Participate in an effort to share Behavioral Risk Assessment data with local audiences, including other prevention providers; and,
- 6) Participate in technical assistance training on developing impact evaluation designs.

1999 - By Year Three of the five-year evaluation plan (1999), prevention providers are expected to build upon their evaluation training experience, and develop and implement an impact

evaluation design. Experimental or quasi-experimental evaluation designs will not be required of prevention providers. Rather, a simple “before and after” design appropriate to the intervention can be used.

By December 31, 1999, all AIDS Office-funded HIV prevention providers will...

- 1) Continue using the Behavioral Risk Assessment to measure HIV-related risk behaviors among their target populations;
- 2) Continue to describe implications derived from the Behavioral Risk Assessment for their program designs;
- 3) Demonstrate the skills needed to develop, conduct, and report on impact level evaluation;
- 4) Incorporate elements of their Behavioral Risk Assessment data into an impact level evaluation design (this may require collection of additional site-specific variables to detect changes in their clients over time);
- 5) Measure changes in behavior by implementing and analyzing the impact evaluation (“before and after”) design; and
- 6) Report findings from impact evaluation to HPPC and AIDS Office.

2000-2001 - In Years Four and Five, it is anticipated that the level of evaluation-related technical assistance for prevention providers will be reduced, and that programs will have developed the skills and knowledge needed to conduct simple program impact evaluation, using the Behavioral Risk Assessment variables as major elements of evaluation design.

During 2000-2001, all AIDS Office-funded HIV prevention providers will continue to...

- 1) Use the Behavioral Risk Assessment to measure HIV-related risk behaviors among their target populations;
- 2) Conduct impact level program evaluation to test program effectiveness and measure changes in the risk behaviors of the client populations;
- 3) Develop and refine evaluation skills;
- 4) Refine their program designs using evaluation data; and
- 5) Share their evaluation findings with the HPPC and local audiences.

Accountability

At the Prevention Provider Level, the strategic evaluation/data collection plan will be implemented in a context of mutual accountability and cooperation between the AIDS Office, the HPPC, local prevention providers, and technical assistance consultant agencies. The following accountability measures have been established to govern this process:

- Each prevention contractor will, together with a primary technical consultant and an AIDS Office Program Manager, formulate a plan for the organizational development and technical assistance that it will receive. This program-specific plan will contain objectives designed to allow for measurement of the success of the technical assistance process—from the perspectives of both the support provider (consultant) and the recipient of the support (prevention provider). The active participation of both parties in the capacity-building process will be required to meet those objectives, the achievement of which will be assessed at the end of each year. Future technical assistance to a contractor will depend in part on the degree to which that contractor has engaged in and utilized the capacity-building support it received in the past.
- The objectives of Prevention Provider Level data collection build on one another, and represent gradually increased expectations with each new year of contracts. A prevention provider that has been following the timeline and requirements for the Behavioral Risk Assessment, for example, will then be ready to incorporate the findings into a simple impact evaluation design. In this manner, any prevention provider making a genuine effort to use the technical support provided and to meet the first year requirements will find it that much easier to meet requirements for future years of evaluation. However, a funded prevention provider that does not take advantage of these early opportunities to build evaluation capacity will likely lose the ability to compete in future years, when it is anticipated that less technical assistance will be provided, and that Prevention Provider Level evaluation will focus more on measuring program impact and analyzing and responding to good impact data.
- While evaluation findings will not influence funding for at least the first two years of the five-year plan, each prevention provider will have to demonstrate a willingness and ability to use evaluation findings to increase program effectiveness. Programs that repeatedly fail to utilize evaluation results or to show any positive behavioral change in their target populations cannot (and will not) be funded indefinitely.
- In addition to these mechanisms of prevention provider accountability, there will be an internal evaluation of the efforts of the AIDS Office, the HPPC, and technical assistance consultants to build prevention provider skills and capacity. If these efforts are insufficient to support the new standards for Prevention Provider Level evaluation, then they will have to be redirected and reassessed.

III. INTERVENTION RESEARCH LEVEL

The Intervention Research Level describes a five-year plan to measure the impact of interventions on various populations, using experimental and quasi-experimental evaluation designs. Since the activities associated with Intervention Research Level are beyond the capacity and purview of most prevention providers, responsibility to carry out this work rests primarily with the AIDS Office. The Intervention Research Level consists of three key components: 1) ongoing information gathering and data collection, including both formative and impact research; 2) identification of knowledge gaps for the purpose of setting local research priorities; and, 3) design and implementation of local prevention research studies.

Prevention providers and the HPPC will provide advice and guidance to the AIDS Office as it carries out these activities. The three-step process of information gathering, research priority-setting, and research design and implementation reflects a community-wide commitment to use information to enhance program and intervention effectiveness. To support those activities the AIDS Office will seek funding from federal funding sources, including the CDC, National Institutes of Mental Health (NIMH), National Institutes of Health (NIH), and others.

Research Inventory - Using Information to Make A Difference

In order to set local research priorities, the Committee feels that it is important to know exactly what research has already been undertaken with particular populations and interventions. As information is collected and synthesized, this research inventory will form the basis of a training and technical assistance effort, organized and funded by the AIDS Office, where prevention providers will have an opportunity to critique the literature and rate the value and relevance of the existing interventions and to review the formative and impact evaluation research findings. Taken together, this information will be used by the HPPC and the prevention provider community, in consultation with the AIDS Office, to set priorities for local evaluation research studies. The information-gathering effort will be ongoing over the full five years of the strategic evaluation/data collection plan. Lessons learned throughout this process will be used by prevention providers to develop, adapt, and refine effective interventions for local use.

The HPPC will advise the AIDS Office on the information-gathering and data collection process, but the AIDS Office will take primary responsibility for ensuring that it is completed. The Committee recommends that in order to maximize the usefulness of the information gathered by the AIDS Office, the summaries presented to the public should include a full description of how interventions were developed, what processes, methods, and instruments were used during the formative period, and what methods were used to evaluate the strategies with client populations. This approach cultivates local capacity to adapt interventions while using tested program development strategies; it fosters a process of co-creation, with local prevention providers adapting models for use with new or different target populations.

Setting Research Priorities - Using Information to Make A Difference

During the first two years of the five-year plan (1997 and 1998), the research inventory and the information collected about the effectiveness of different interventions will be used by the HPPC and the AIDS Office, to begin to set local research priorities for San Francisco studies. These research priorities will be submitted to national funding agencies, to ensure that the RFP process for research is consistent with local priorities.

Conducting Prioritized Studies

Through the establishment of research priorities, the HPPC may identify the need to conduct research that is intervention-specific—there may be insufficient information about the effectiveness of a particular intervention—or there may be a need to conduct research that is population-specific—we know how an intervention works with one population, but not with another. The AIDS Office will be responsible for securing funding for these prioritized studies and for overseeing their design and implementation.

Guiding Principles

A primary goal of the five-year strategic evaluation/data collection plan is to use information more efficiently and effectively. This new commitment to gather, analyze, and share current evaluation better positions the AIDS Office to support—and better positions prevention providers to implement—effective prevention strategies. This approach reflects a new promise of cooperative prevention program planning, implementation, and evaluation in San Francisco.

The following principles will guide activities related to the Intervention Research Level of the strategic evaluation/data collection plan:

- 1) Before prioritizing experimental or quasi-experimental research studies, it is critical to first gather existing effectiveness information available at the national, state, and local levels, and to then identify gaps in local information.
- 2) A summary of evaluation research should be available to local prevention providers through ongoing, facilitated discussions/forums that contribute to advancing the state-of-the-art and foster collegiality and cooperation rather than competition. These forums should also provide a mechanism for obtaining community feedback on the development of research study priorities.
- 3) Experimental evaluation priorities generated by the HPPC, AIDS Office, and local prevention providers should be given to funders and potential funders proactively so that local priorities might influence funder priorities.
- 4) Evaluation research undertaken under the auspices of the HPPC must have direct programmatic implications.

- 5) San Francisco is fortunate to have cultural and ethnic diversity; it is important to value that diversity, to be respectful of differences, and to ensure that evaluation instruments reflect the highest level of cultural competency.
- 6) Client confidentiality is paramount to the protection of human subjects involved in research. At all levels of evaluation, confidentiality shall be protected, particularly around HIV status, and state laws protecting HIV- infected persons shall be observed. The need for informed consent should also be reviewed by the HPPC and the AIDS Office to ensure the adequate protection of human subjects involved in research.

Intervention Research Level Objectives

The Intervention Research Level is intended to use information strategically, to learn what is known about program design, theory and evaluation research, and to incorporate that information/knowledge into program development and research efforts. The more that San Francisco prevention providers know about what is working and why, the less time and effort will be wasted, leaving more resources available for high quality direct program services.

1997 - During Year One of the five-year evaluation plan (1997), the AIDS Office and its consultants will take lead responsibility for conducting a research inventory, which will entail gathering and summarizing studies and evaluation findings on interventions, including information about the context within which, and the process by which, interventions are developed. This information will be collected and disseminated on an ongoing basis over the full five years of the strategic evaluation/data collection plan. The dissemination process will include opportunities for prevention providers to critique the literature, and recommend new approaches to and opportunities for research and evaluation of locally-implemented interventions. Prevention providers will incorporate lessons learned from others in their efforts to design, adapt, and refine effective interventions and strategies. In Year One (1997), the research inventory will also be used by the HPPC, with guidance from the AIDS Office, and local prevention providers, to identify gaps in general knowledge about the effectiveness of interventions and to inform the priority-setting process for local research.

By December 31, 1997, the AIDS Office will...

- 1) In cooperation with the CDC and other federal funding sources, as well as consulting organizations, the HPPC, and local prevention providers, conduct a research inventory, and gather and summarize formative and impact evaluation research studies and findings.
- 2) Present public summaries of what is working, why and for whom, to the HPPC and the broader prevention provider community to promote group discussions.
- 3) Guide the HPPC in its effort to identify gaps in research and evaluation of interventions and set priorities for San Francisco evaluation and research efforts.

- 4) Proactively inform potential funders about local funding needs, by developing and distributing a summary of data collection efforts, and sharing locally-defined research priorities with CDC, NIDA, NIMH, and others.

1998 - During Year Two of the five-year evaluation plan (1998), the AIDS Office and its consultants will continue to take lead responsibility for updating the research inventory. This information will continue to be presented to local prevention providers, so that they are better positioned to design, adapt, and refine effective intervention strategies. The AIDS Office will seek funding to support the evaluation research priorities established by the HPPC in Year One (1997). Working with independent research organizations and with input from prevention providers, the AIDS Office will also use the locally-defined priorities to guide the design and implementation of small-scale pilot studies to assess the effectiveness of interventions with specific target populations. The results from these pilot studies will be used to secure funding for larger evaluation studies.

By December 31, 1998 the AIDS Office will...

- 1) In cooperation with the CDC, consulting organizations, the HPPC, and local prevention providers, continue to update the evaluation research inventory.
- 2.) Continue to present summaries of what is working, why and for whom.
- 3) Provide guidance and assistance to the HPPC in its continuing efforts to identify gaps in knowledge about interventions and to prioritize and refine the focus of local research efforts.
- 4) Seek funding for local research and evaluation efforts.
- 5) Use the locally-defined research priorities and work in cooperation with local consulting organizations, the HPPC, and the broader community of prevention provider, to design and pilot small-scale studies to assess the effectiveness of interventions with specific target populations.

1999-2001 - The AIDS Office will continue to collect evaluation information and disseminate it according to the process described in Years One and Two (1997 & 1998). This information will continue to be used by local prevention providers to improve the effectiveness of their intervention efforts. By the end of Year Three (1999), data from the small-scale pilot studies will have been incorporated into the design of large-scale research studies to evaluate the effectiveness of San Francisco interventions. The AIDS Office, working with local research organizations and consultants, the HPPC, and the broader community of prevention providers, will plan and implement at least one large-scale experimental or quasi-experimental research study to test the efficacy of different interventions with different target populations.

By December 31, 2001, the AIDS Office will...

- 1) In cooperation with the CDC, consulting organizations, the HPPC, and local prevention providers, continue to update the evaluation research inventory.
- 2) Continue to present summaries of what is working, why and for whom.
- 3) Continue to seek funding for local evaluation research priorities.
- 4) In cooperation with local consulting organizations, the HPPC, and the broader community of prevention providers, plan and implement at least one large-scale experimental or quasi-experimental research study to test the efficacy of different interventions with different target populations.
- 5) Present findings, as they become available, to the HPPC and the broader prevention community.

Accountability

In identifying the specific components of the five-year strategic evaluation/data collection plan, the Evaluation and Technical Assistance Committee articulated the need for mutual accountability and collaboration at every level of evaluation. The committee has identified the following as priority accountability issues for the Intervention Research Level:

- The Committee recommends that the research priority-setting process be initiated by the HPPC with assistance from the AIDS Office and Department of Public Health staff, and that it involve other community members and members of the prevention provider community.
- All researchers involved in local research studies associated with this effort will be expected to adhere to the priorities identified by the HPPC process, and to observe all protocols associated with the protection of human subjects. However, if RFPs are issued and funding is made available for studies that are not within the identified priorities, researchers can explore these options as well.
- All researchers involved in local research studies associated with this effort will commit to sharing their findings with the prevention provider community, in a timely manner, as data become available.
- Researchers will be expected, to the extent possible, to use the standardized sociodemographic and Behavioral Risk Assessment variables, as developed and defined by the HPPC.

- In cases where researchers require letters of HPPC support for their work, they will be expected to adhere to the HPPC-approved process for seeking support. See Chapter 3 - Epidemiologic Profile, Section XI, for a discussion of these procedures.

IV. POPULATION-BASED PREVENTION SURVEILLANCE

Prevention Provider Level evaluation can be used to measure the impact a program has on its client population and Intervention Research Level evaluation can be used to experimentally evaluate the impact of interventions on various populations. However, to understand the cumulative effect of all prevention efforts, evaluation has to take place at the population level. Population-Based Prevention Surveillance aims to evaluate the impact of prevention at the population level by tracking city-wide trends in indicators of HIV risk or infection over time.

Population-Based Prevention Surveillance differs from traditional surveillance conducted by the Health Department, because it combines existing sources of data routinely collected to track disease trends with new sources of data, which can be used to measure the impact of prevention efforts. The synthesis of multiple sources of data such as STD surveillance (trends in STD rates over time), HIV surveillance (trends in HIV rates in sites serving the general population and high risk-clients) and behavioral surveillance (annual population-based risk behavior surveys), can be a useful gauge of the community-wide impact of HIV prevention efforts.

Developing a Population-Based Prevention Surveillance system requires: 1) the identification of relevant and reliable prevention indicators; 2) the development of standard variables that can be used to measure prevention indicators over time; and 3) the determination of appropriate methods of data collection for different indicators (i.e., population-based risk behavior surveys, sentinel seroprevalence surveys, and neighborhood mapping of disease trends).

The San Francisco AIDS Office was recently awarded a grant from the CDC to facilitate the development, field-testing, and refinement of standard HIV prevention indicators to be used by all US health jurisdictions, as well as local indicators relevant in San Francisco. This grant will allow the AIDS Office, the HPPC, and local providers to be proactive partners in the development of *community-wide* evaluation measures, rather than wait for such measures to be imposed by federal funders.

According to the CDC grant, the prevention indicators are primarily intended to reflect an integration of existing data sources. While data on seroprevalence, related risk behaviors, and markers for risk behaviors (i.e., STDs) are routinely gathered in a variety of settings throughout San Francisco, there is a need to identify, standardize and synthesize a core set of indicators suitable for evaluating the community-level impact of HIV prevention interventions.

Guiding Principles

The guiding principles for the development and use of prevention indicator data for city-wide evaluation efforts are:

- 1) Community-wide prevention indicator research conducted under the auspices of the HPPC must have implications for prevention planning and evaluation.
- 2) Although providers should collaborate in community-wide evaluation efforts, it is not their responsibility to conduct community-wide prevention indicator and risk behavior surveillance.
- 3) Community-wide Population-Based Prevention Surveillance should be coordinated with provider level evaluation. Therefore, prevention indicator and behavioral surveillance efforts should incorporate the HPPC-approved sociodemographic and risk behavior variables that are required at the provider level.
- 4) Population-based Prevention Surveillance findings should be made available to local CBOs through ongoing, facilitated discussion/forums. This would make surveillance data more accessible to providers and would facilitate community feedback on standard measures and data collection processes.
- 5) San Francisco is fortunate to have a great deal of cultural and ethnic diversity. However, this level of diversity requires that everyone working in the prevention system be respectful of cultural differences, and that evaluation tools and instruments reflect a high level of cultural competency.
- 6) There is an expectation that client/subject confidentiality, particularly around HIV status will be protected at all costs, and that state laws protecting HIV-infected persons will be closely followed.

Population-based Prevention Surveillance Level Objectives

1997 - In 1997, the emphasis of population-based prevention surveillance evaluation is on developing, piloting, and revising a standard set of prevention indicators.

By December 31, 1997, the AIDS Office will...

- 1) Establish a collaborative team of individuals from the other DPH programs (e.g., STD Prevention and Control), the HPPC, local agencies, local research institutes (e.g., CAPS), and the CDC to accomplish objectives 2-8;
- 2) Work with its collaborators to develop a standard set of prevention indicators;

- 3) Identify locally-appropriate supplemental HIV prevention indicators through key informant interviews, focus groups, and consultation with HIV prevention providers and researchers;
- 4) Identify potential sources of data for the core and supplemental HIV prevention indicators;
- 5) Collect recent prevention indicator data from identified sources to test their availability, feasibility, validity, and usefulness (this will include the primary analysis of the indicator data, including stratification by sub-populations of local interest);
- 6) Develop a protocol with methodologies for implementing the integration, collection, analysis, interpretation, and use of prevention indicator data in San Francisco;
- 7) Develop a plan for local and state dissemination of information regarding programmatic usefulness of the HIV prevention indicator data; and
- 8) Prepare and disseminate a report on the intended uses of the prevention indicators, the results of the field tests, and the feasibility of continued prevention indicator surveillance.

1998 - In the first part of Year Two (1998), the emphasis of population-based prevention surveillance is on continued efforts to disseminate pilot findings, refine the indicator measures, and develop data collection, management, analysis, and reporting protocols. In the second part of 1988, the protocols will be fully implemented.

By December 31, 1998, the AIDS Office will...

- 1) Continue to disseminate findings from the 1997 pilot to the HPPC and the broader prevention community;
- 2) Refine the standard prevention indicators;
- 3) Refine the protocol and systems for collecting prevention indicator data throughout San Francisco;
- 4) Implement the protocol and collect indicator data city-wide; and
- 5) Manage the indicator data and begin data analysis.

1999 - In Year Three (1999), Population-Based Prevention Surveillance Level evaluation efforts will focus on continued data collection, management, analysis, and reporting.

By December 31, 1999, the AIDS Office will...

- 1) Continue to collect prevention indicator data;

- 2) Analyze and summarize indicator data; and
- 3) Disseminate findings to local, state, and federal CBOs and agencies.

2000-2001 - In the fourth and fifth years (2000-2001), analysis of trends in the indicator data should allow for interpretation that can be used to inform prevention planning and evaluation efforts.

By December 31, 2001, the AIDS Office will...

- 1) Continue to collect prevention indicator data;
- 2) Analyze and summarize *trends* in the prevention indicator data;
- 3) Disseminate findings to local, state, and national agencies; and
- 4) Use prevention indicator data to inform prevention planning and evaluation efforts.

Accountability

In the spirit of cooperation and joint responsibility for evaluation research, the Committee set the following mechanisms to ensure mutual accountability:

- The selection of locally appropriate indicators will be coordinated with the HIV Prevention Planning Council to assure that the measures are consistent with the Council's HIV prevention objectives, priorities, and strategic evaluation plan.
- Population-Based Prevention Surveillance Level findings will be shared with CBOs through regular reports (similar to the current surveillance reports) and through forums where providers can provide feedback, as well as ask questions about the prevention indicator measures and findings.
- To the extent possible, the standardized sociodemographic and Behavioral Risk Assessment variables approved by the HPPC will be used in community-wide prevention indicator surveillance.
- If continued work on the development and implementation of Prevention Indicator Surveillance requires a letter of support from the HPPC, researchers will be expected to adhere to the HPPC-approved process for seeking Council support.

V. METHODS USED IN DEVELOPING THE STRATEGIC EVALUATION PLAN

Background Research - Preliminary Assessment

In developing the Prevention Provider Level evaluation/data collection requirements for the strategic evaluation plan, the committee began with a thorough review of evaluation-related literature, existing instruments used by San Francisco prevention providers, telephone interviews with key informants in selected health departments and universities, and telephone interviews with a range of San Francisco prevention providers (individual agencies and collaborations). The results of this background research indicated that:

- 1) There was no literature available (as of 1996) describing the standardization of HIV prevention interventions, impact measures, and/or outcome measures by a local health jurisdiction.
- 2) Few if any jurisdictions were attempting to standardize behavioral risk data collection. While most key informants felt that such standardization would be helpful, they anticipated many barriers to its implementation. Instead of standardizing behavioral risk variables for all prevention interventions, they chose to limit their standardization efforts to counseling and testing variables.
- 3) Most San Francisco prevention provider agencies were basing their program evaluation on the measurement of process objectives. (This limitation was apparent in program data collection forms and methods.)

In order to obtain a summary of each prevention provider's program, evaluation strategy, and preliminary technical assistance needs, each agency was asked to submit a two-page description to the AIDS Office, along with any evaluation instruments currently being used by that agency. Through a review of these two-page summaries and instruments, the Committee identified the prevention evaluation measures currently in use in San Francisco, and developed a preliminary list of agency needs for evaluation capacity-building. Overall, the prevention providers interviewed exhibited a wide range of evaluation preparedness. Agencies were generally collecting information, but did not know how to analyze, interpret, or make use of that information. While some had impact-level objectives for their programs, there was little documentation of specific measures to determine whether or not these objectives had been met. Some programs relied heavily on client satisfaction surveys, and had no way of measuring changes or intended changes in client behavior. The aim of providing tailored, realistic capacity-building to support the implementation of the strategic evaluation/data collection plan, particularly at the Prevention Provider Level, was then carried out in the Organizational Development/Technical Assistance needs assessment of San Francisco prevention contractors. This in-depth assessment confirmed preliminary findings of the consistent need for evaluation technical assistance for prevention providers.

Call for Standardization and Capacity-Building

During the preparation of the epidemiologic profile and resource inventory for the 1995 San Francisco HIV Prevention Plan, the need to standardize definitions and measures of prevention information became clear. Many of the 1995 Plan objectives also reflected a need to improve the evaluation capacities of prevention providers. In an effort to meet the HPPC objectives, the AIDS Office applied for, and was awarded, CDC supplemental funding for capacity-building (to improve program planning, implementation, and evaluation) with a focus on standardizing prevention information, developing a strategic evaluation plan, and assessing agencies' capacity to perform evaluation. In the first part of 1996, the Evaluation and Technical Assistance Committee was formed and charged with developing a strategic evaluation/data collection plan.

Evolution of the Strategic Plan

Work on the strategic evaluation/data collection plan actually began in 1994, when the first-year Council began to set the tasks for evaluation, which were later assigned to a 1995 Evaluation Task Force (not a sub-committee of the Council, but an independent body of interested prevention providers and AIDS Office staff), which began to explore possibilities for the standardization of prevention information, reporting requirements, and variables for data collection. This task force also helped the AIDS Office develop the CDC application that focused on capacity-building. Some members of the Evaluation Task Force went on to participate on the 1996 Evaluation and Technical Assistance Committee, which functioned as an official committee of the HPPC.

1996 marked the first time that the HPPC had an opportunity to implement recommendations from the Year One (1994) Plan. To ensure that these recommendations would be carried out faithfully, and to continue the task force work in a timely manner, current HPPC members who had one more year to serve and former Council members who knew about the HPPC evaluation priorities were asked to join this committee.

Attachment 1

REQUIRED SEXUAL BEHAVIOR QUESTIONS [Males, Transgender MTFs (pre-op), Transgender FTMs (post-op)]

In the *past 12 months*, have you had any type of sex with a male, transgender MTF (pre-op), or transgender FTM (post-op)?

Yes No



In the *past 3 months*, have you had...

Anal Receptive (someone's penis in your rectum)

Yes No



Frequency of anal receptive
Frequency of condom use with anal receptive

Anal Insertive (your penis in someone's rectum)

Yes No



Frequency of anal insertive
Frequency of condom use with anal insertive

Giving Fellatio (your mouth on someone's penis)

Yes No



Frequency of giving fellatio
Frequency of condom use when giving fellatio.

Receiving Fellatio (someone's mouth on your penis)

Yes No



Frequency of receiving fellatio.
Frequency of condom use when receiving fellatio.

In the *past 12 months*, have you had any type of sex with a female, transgender MTF (post-op), or transgender FTM (pre-op)?

Yes No



In the *past 3 months*, have you had...

Anal Insertive (your penis in someone's rectum)

Yes No



Frequency of anal insertive
Frequency of condom use with anal insertive

Vaginal Insertive (your penis in someone's vagina)

Yes No



Frequency of vaginal insertive
Frequency of condom use with vaginal insertive

Giving Cunnilingus (your mouth on someone's vagina or clitoris)

Yes No



Frequency of giving cunnilingus
Frequency of dental dam/barrier use when giving cunnilingus.

Receiving Fellatio (someone's mouth on your penis)

Yes No



Frequency of receiving fellatio.
Frequency of condom use when receiving fellatio.

REQUIRED SEXUAL BEHAVIOR QUESTIONS
[Females, Transgender MTFs (post-op), Transgender FTMs (pre-op)]

In the past 12 months, have you had any type of sex with a male, transgender MTF (pre-op), or transgender FTM (post-op)?

Yes No
↓

In the past 3 months, have you had...

Anal Receptive (someone's penis in your rectum)

Yes No
↓

Frequency of anal receptive
Frequency of condom use with anal receptive

Vaginal Receptive (someone's penis in your vagina)

Yes No
↓

Frequency of vaginal receptive
Frequency of condom use with vaginal receptive

Giving Fellatio (your mouth on someone's penis)

Yes No
↓

Frequency of giving fellatio
Frequency of condom use when giving fellatio

Receiving Cunnilingus (someone's mouth on your vagina or clitoris)

Yes No
↓

Frequency of receiving cunnilingus
Frequency of dental dam/barrier use when receiving cunnilingus.

In the past 12 months, have you had any type of sex with a female, transgender MTF (post-op), or transgender FTM (pre-op)?

Yes No
↓

In the past 3 months, have you had...

Vaginal to Vaginal (your vagina, labia or clitoris touching or rubbing on someone else's vagina, labia or clitoris)

Yes No
↓

Frequency of vaginal to vaginal sex
Frequency of dental dam/barrier use with vaginal to vaginal sex

Giving Cunnilingus (your mouth on someone's vagina or clitoris)

Yes No
↓

Frequency of giving cunnilingus
Frequency of dental dam/barrier use when giving cunnilingus

Receiving Cunnilingus (someone's mouth on your vagina or clitoris)

Yes No
↓

Frequency of receiving cunnilingus
Frequency of dental dam/barrier use when receiving cunnilingus

REQUIRED INJECTION DRUG USE BEHAVIOR QUESTIONS
(Regardless of gender identification)

In the *past 12 months*, have you injected any type of drugs, hormones, or vitamins?

Yes

No



In the *past 3 months*, have you injected any type of drugs, hormones or vitamins?

Yes

No



Frequency of injections

Frequency of sharing needles / syringes

Frequency of bleaching (if participant shared needles / syringes in past 3 months)

Attachment 2

SEXUAL BEHAVIOR EXAMPLE

(Possible wording for receptive anal sex series of questions)

I. In the *past 12 months*, have you had any type of sex (anal, oral, or vaginal) with a male, MTF (pre-op), or FTM (post-op)?

Yes

No



1a. In the *past 3 months*, have you had anal receptive sex (someone's penis in your rectum)?

Yes

No



1b. In the *past 3 months*, how many times have you had anal receptive sex (someone's penis in your rectum)?

_____ Times (*you can ask about the number of times in a week & multiply by 12*)

1c. In the *past 3 months*, how often did you use condoms when you had anal receptive sex (someone's penis in your rectum)?

Always

Almost Always

Sometimes

Almost Never

Never

NOTE: questions 1a-1c would be repeated for all types of sex appropriate based on the gender of the participant and their partner.

NOTE: If participant is incarcerated or in a residential treatment program, questions can be asked for the three months prior to incarceration or entering a residential program.

INJECTION DRUG USE BEHAVIOR EXAMPLE

(Possible wording for injection drug use questions)

II. In the *past 12 months*, have you injected any type of drugs, hormones, or vitamins?

Yes

No



2a. In the *past 3 months*, have you injected any type of drugs, hormones, or vitamins?

Yes

No



2b. In the *past 3 months*, how many times have you injected any type of drugs, hormones, or vitamins?

_____ Times (*you can ask about the number of times in a week & multiply by 12*)

2c. In the *past 3 months*, how often did you use a needle that someone else had used before you (including your family, friends, and sex partners)?

Always

Almost Always

Sometimes

Almost Never

Never

(If 2c = Almost always, sometimes, almost never or never....ask 2d)



2d. In the *past 3 months*, when you used needles or syringes that someone else had used, how often did you clean the needles or syringes with bleach before you used them?

NOTE: If participant is incarcerated or in a residential treatment program, questions can be asked for the three months prior to incarceration or entering a residential program.

Attachment 3

1. Which racial/ethnic groups do you most closely identify with? (You can choose two groups)

First Response (please check only box)

**** AFRICAN AMERICAN / BLACK**

African American Black

Caribbean Black

African Black

All other non-Hispanic Black

**** ASIAN / PACIFIC ISLANDER**

East Asian: Japanese, Korean, etc.

South Asian: Indian, Nepalese, Bangladeshi, Pakistani, Sri Lanka

Southeast Asian: Vietnamese, Cambodian, Laotian, Thai, Burmese,

Chinese, Taiwanese, Hong Kongese

Filipino

Pacific Islander (not Filipino)

Other Asian

**** EUROPEAN AMERICAN / WHITE**

**** LATIN / HISPANIC**

Mexican, Mexican American

Cuban

Puerto Rican

Central American: Guatemalan, Nicaraguan, El Salvadorean

South American: Brazilian, Venezuelan, Chilean

Spanish, Portuguese, Cape Verdean

Other Caribbean Hispanic

Other Latin/Hispanic

**** NATIVE AMERICAN, ALASKAN NATIVE**

Other (specify) _____

Unknown

Decline to state

Second Response (Please check only one box)

**** AFRICAN AMERICAN / BLACK**

African American Black

Caribbean Black

African Black

All other non-Hispanic Black

**** ASIAN / PACIFIC ISLANDER**

East Asian: Japanese, Korean, etc.

South Asian: Indian, Nepalese, Bangladeshi, Pakistani, Sri Lanka n

Southeast Asian: Vietnamese, Cambodian, Laotian, Thai, Burmese,

Chinese, Taiwanese, Hong Kongese

Filipino

Pacific Islander (not Filipino)

Other Asian

**** EUROPEAN AMERICAN / WHITE**

**** LATIN / HISPANIC**

Mexican, Mexican American

Cuban

Puerto Rican

Central American: Guatemalan, Nicaraguan, El Salvadorean

South American: Brazilian, Venezuelan, Chilean

Spanish, Portuguese, Cape Verdean

Other Caribbean Hispanic

Other Latin/Hispanic

**** NATIVE AMERICAN, ALASKAN NATIVE**

Other (specify) _____

Unknown

Decline to state

NOTE: ** Only the Major categories (In bold caps) are required.

2. What language do you speak most often at home?

Language Please check only one box:

Cambodian	<input type="checkbox"/>
Cantonese	<input type="checkbox"/>
English	<input type="checkbox"/>
Laotian	<input type="checkbox"/>
Mandarin	<input type="checkbox"/>
Russian	<input type="checkbox"/>
Spanish	<input type="checkbox"/>
Tagalog	<input type="checkbox"/>
Thai	<input type="checkbox"/>
Vietnamese	<input type="checkbox"/>
Other (specify) _____	<input type="checkbox"/>
Unknown	<input type="checkbox"/>
Decline to state	<input type="checkbox"/>

3. What is your age?

Age in years	<input type="text"/>	(# years)
Unknown	<input type="checkbox"/>	
Decline to state	<input type="checkbox"/>	

Note: Age can be calculated in years if birthdates are obtained.

4. What is your gender identification?

Gender

Please check the most appropriate one:

Male

Female

Transgender

Male to female (pre-op)

Male to female (post-op)

Female to male (pre-op)

Female to male (post-op)

Other (specify) _____

Unknown

Declined to state

5. Where have you received most of your health care in the past year?

Primary Health Care

Please Check the most appropriate:

Private doctor, private practice or HMO

VA military

Hospital emergency room

Public clinic or health center

Alternative/complementary care

Other (specify) _____

None

Unknown

Decline to state

6. Where do you currently live?

Living Situation

Please check only one:

- House, apartment or flat
- A friend or family member's home, apartment or flat
- Single room occupancy hotel room
- Halfway house or drug/alcohol program
- Shelter
- On the streets, in a park, in a parked car, or in an abandoned building
- Hospital
- Jail
- Other (specify) _____
- Unknown
- Decline to state

7. What is the Zip Code of your residence or the area where you currently live?

- None
- Unknown
- Decline to State

OR....
What is the neighborhood where you currently live?

Attachment 4:

List of optional sociodemographic variables

8. What is your sexual orientation / identity?

Sexual Orientation

Please check the most appropriate:

Lesbian

Gay (male)

Bisexual

Heterosexual (straight)

Other (specify) _____

Unknown

Decline to state

Total

9. What are your main sources of income?

Source of Income

Please check all that apply:

Employment (full time)

Employment (part time)

SSI

GA

SSDI

SDI

AFDC

Other (specify) _____

Unknown

Decline to state

10. How much money do you get each month from all of your income sources?

Monthly Income Level

Write in monthly income level: \$ _____

Unknown

Decline to state

11. What is your highest level of schooling?

Education

Please check the most appropriate

Less Than High School

Some High School

High School Graduate / GED

Some College Education

College Degree

Trade School

Some Graduate School

Graduate Degree

Other (specify) _____

Unknown

Declined to state

Total

--

12. Were you educated in another country?

Yes

☐

specify highest level of schooling _____

No

☐

Total

☐

13. Where have you lived in the past 12 months?

Living Situation

Please check all that apply:

House, apartment or flat

☐

A friend or family members' home, apartment or flat

☐

Single room occupancy hotel room

☐

Halfway house or drug/alcohol program

☐

Shelter

☐

On the streets, in a park, in a parked car, or in an
abandoned building

☐

Other (specify) _____

☐

Unknown

☐

Decline to state

☐

14. What kind of health insurance do you have now?

Health Insurance

Please Check all that apply:

None

Medi-Cal

Medicare

Veteran's Administration

Private Insurance (like Blue Cross) or HMO (like
Kaiser)

Other (specify) _____

Unknown

Decline to state

Attachment 5:

Behavioral Risk Assessment Timeline

Quarter 1

- Negotiate sampling/data collection plan with AIDS Office program manager and technical assistance consultant.
- Work with line staff on instrument and data collection plan.
- Develop instrument.
- Train staff in data collection.
- Pilot test instruments.
- Begin to set up data entry screens.
- Begin data collection.

Quarter 2

- Continue setting up data entry screens
- Continue data collection.
- Train staff in data coding and entry.
- Begin coding and checking data.

Quarter 3

- Finish data collection.
- Finish coding and checking data.
- Enter data.
- Begin analysis.

Quarter 4

- Analyze and summarize data.
- Write up results and key findings.
- Develop recommendations for program design (based on findings).
- Submit results to the AIDS Office.

CHAPTER 10 - CAPACITY BUILDING — ORGANIZATIONAL DEVELOPMENT AND TECHNICAL ASSISTANCE FOR HIV PREVENTION PROVIDERS

I. INTRODUCTION

Overview of the Chapter

This chapter outlines the assessment of prevention providers' capacity building needs conducted in 1996, and a plan for providing organizational development (OD) and technical assistance (TA) to these providers. The chapter is divided into the following five sections:

- I. Introduction
- II. Capacity Assessment Process and Methodology
- III. Assessment Findings and Implications for Technical Assistance
- IV. Technical Assistance Delivery Plan
- V. Committee Operations

Section I describes background information on this project, including the priorities established by the Centers for Disease Control and Prevention (CDC) for capacity building, the priorities established by the HIV Prevention Planning Council (HPPC), and the needs identified in the program assessments. Section II covers the dimensions of capacity prioritized for assessment and the methodology used in working with each prevention provider. Section III reviews the findings of the assessment process, and the implications for providing technical assistance. The fourth section, Technical Assistance Delivery Plan, describes principles established by the Council for allocating TA resources, outlines the objectives for this plan over the next five years, and describes the implementation plan for delivery of technical assistance services. Section V, Committee Operations, describes the committee membership, tasks, and decision making process.

Background

As part of the goals of the 1995 HIV Prevention Plan, the HPPC expressed a desire that "all HIV prevention providers in San Francisco...have the technical and administrative capabilities to provide competent and appropriate prevention programs." To reach this goal, the 1995 Council identified the need to provide technical assistance to community-based organizations to assist them in better planning, implementing, and evaluating their prevention intervention strategies.

The CDC also recognized that building capacity in community-based programs and in the local health jurisdictions was an essential component of ensuring effective prevention efforts. In 1995, the CDC announced the availability of funds through a competitive supplemental

process to build the capacities of community-based organizations and other local service providers to plan, implement, sustain, and evaluate HIV prevention interventions.

This announcement of supplemental funding provided an ideal opportunity for the AIDS Office to acquire the resources necessary to meet the need for capacity building identified by the HPPC. The AIDS Office received supplemental funding from the CDC in April 1995.

The AIDS Office and the HPPC recognized that the overall organizational “health” of many local prevention providers would need strengthening if the effort to improve program planning, implementation, and evaluation was to be successful. For this reason, the focus of the effort was expanded to include both organization development (which would address basic organization capacity, structure, and technology) and technical assistance (the process of assessing and improving the three specific capacities of program development, program implementation, and program evaluation). Out of this focus arose the Organizational Development and Technical Assistance project (the “OD/TA” project) for HIV prevention providers in San Francisco.

Collaborative Planning and Partnerships

The OD/TA project is based on the concepts of partnership and collaboration. In order for the AIDS Office and the HPPC to do successful planning, and for providers to implement effective prevention programs, technical assistance for program planning, implementation, and evaluation is imperative. This technical assistance will be most useful if it utilizes the variety of expertise and resources available in San Francisco. A team approach to assessing the organizational capacity of agencies and providing technical assistance has been developed.

The team responsible for assessing and implementing OD/TA includes:

- A group of consulting firms (Harder+Company Community Research, Polaris Research and Development, and Communication Sciences), led by the Support Center for Nonprofit Management.
- The HPPC Evaluation and Technical Assistance Committee.
- The AIDS Office.
- The STD/HIV Prevention Training Center.

This team acknowledges the level of expertise that exists within the provider community and accordingly, the OD/TA project is designed to draw on such strengths, rather than focusing on provider weaknesses.

II. CAPACITY ASSESSMENT PROCESS AND METHODOLOGY

The project was divided into two phases. Phase I, an assessment of programs' capacity to plan, implement, and evaluate HIV prevention services, was completed in 1996. Phase II will include the delivery of technical assistance based on the assessment findings and will begin in January 1997.

Development of the Assessment Process

The first phase of the OD/TA assessment examined the following areas:

- Inventory and description of any technical assistance previously received by various sources.
- Analysis of the outcome of recommended organizational or program changes made as a result of prior technical assistance.
- Assessment of current: 1) organizational capacity; 2) program development capacity; and 3) evaluation design and data analysis capabilities.

Methodology

Once all potential recipients of the assessment and technical assistance were identified, the capacity assessment protocols for community-based organizations and programs in the San Francisco Department of Public Health programs were developed. The Evaluation and Technical Assistance Committee, along with the Council Co-Chairs and AIDS Office staff, worked closely with the consulting team in developing the OD/TA protocols.

A community orientation meeting was held in March 1996 to which all targeted HIV programs were invited. Approximately 20 of the 35 groups that had been solicited attended. Those in attendance agreed to participate in the capacity assessment. Summary materials about the project were distributed to all who attended as well as to those who were absent.

The assessment involved a mail-out survey and an on-site assessment which included interviews with staff from several levels. A team of twelve consultants were trained to conduct "on-site" assessments. Prior to visiting an agency, the consultants became familiar with the programs by reviewing literature from the agencies and becoming familiar with each program's data collection tools. They also piloted the on-site evaluation instruments with two programs prior to conducting the site visits. The instrument was revised based on pilot-test results.

The project assessed 23 prevention providers who had contracted with the AIDS Office and/or had been funded directly by the State or the CDC, as well as seven prevention providers based within units of the Department of Public Health. In addition, the AIDS Office and the Council identified a need to address the effectiveness of the AIDS Office itself in supporting and administering the efforts of the prevention provider community.

Between April and June 1996, consultants met with each agency two to three times to complete the interviews. To the degree possible, consultants were not assigned to organizations with whom they had already had a relationship. For collaborative prevention programs, all prevention program agencies and the fiscal agent were assessed separately.

As shown in Exhibit 10.1, three core areas were assessed: organization, program development, and evaluation capacity.

Exhibit 10.1
Indicators of Capacity

Organization	Program Development	Program Evaluation
Structure Communication Staffing — Composition Staffing — Training Budget / Fundraising Strategic Planning	Behavioral Theory Strategy Program Design Planning Behavior Change Process Objectives Impact Objectives Outcome Objectives Understanding HPPC Ability to use data in formative evaluation	Design Evaluation Implementation Evaluation Capacity to obtain data Capacity to use data Capacity to use computers

In addition to the core capacity areas outlined above, past experience with technical assistance, collaboration experience, and interactions with the AIDS Office were evaluated.

Analysis

The analysis required a standard for inter-agency and cross agency comparisons. Consultants compared agencies by using a basic scale of “low - medium - high” or “hinder - neutral - support” rating to measure each of the capacity elements. Each agency was assigned a score from one to three (1-3) in each area (low or hinder=1, medium or neutral=2, high or support=3), based on consultants’ assessment of the agency. Consultants determined scores by answers to standard questions.

In order to control for inter-rater reliability, a team of four experienced consultants reviewed and scored all the files completed by their teams. Consultants created narrative standards to describe characteristics of different capacity levels for each of the capacity elements. These narrative standards were used to codify the scores of each capacity element (see Exhibit 10 at the end of this chapter). In those cases where agencies displayed both high and low capabilities in a given area, the agency was generally given a neutral or medium rating.

Analysis findings were submitted to each agency for verification and revision. Final reports were submitted to the AIDS Office program managers. Ultimately, 23 community-based prevention programs and six Department of Public Health prevention programs were assessed. Five targeted community-based programs chose not to participate and one Department of Public Health-based program did not participate.

An internal assessment of the AIDS Office staff who work closely with prevention providers will begin early in 1977. A separate protocol and methodology will be developed for this assessment.

III. ASSESSMENT FINDINGS AND IMPLICATIONS FOR TECHNICAL ASSISTANCE

Although extensive individual reports for each agency were completed, it is useful to summarize the entire group of agencies to look at system-wide need. Assessment findings are presented in two formats. The first is a narrative summary of overall themes across all prevention programs. The second is in graphic form and shows the “rankings” for each dimension of capacity for several subgroups of programs. Following the presentation of the assessment findings regarding specific organizational capacities, the findings from three additional assessment questions are discussed: relationship with the AIDS Office, experience with collaborations, and previous experience with technical assistance. Finally, the implications for technical assistance are discussed.

Themes Across Prevention Programs

Based on the capacity assessment of the 23 community-based prevention programs and the six Department of Public Health prevention programs, the OD/TA team found a wide spectrum of provider ability. The situations of many agencies are discussed below. Generally, considerable agreement existed between agencies and assessors regarding the assessment findings for a given agency.

Organizational Capacity

Structure

- Collaborative relationships are a concern to many of the agencies interviewed. The difference between “organic” versus “forced” collaborations seems to directly affect the division of authority, decision making, planning, and funding issues of agencies.
- Programs at agencies where the primary mission is broader than HIV prevention sometimes experience a “step-child” type of relationship with the larger organization.
- Due to agency mergers or reorganization, some programs see the lack of stability of agency structure as a barrier to good program work.
- A number of agencies report unclear or irrational structures (e.g., planning, mission statement; many structures did not support agency-wide planning). Some report a lack of

clarity about reporting hierarchies, the roles of work groups, and inexplicable structural constraints on communication or decision making.

Staffing Mix and Levels of Expertise

- Line workers tend to have relevant expertise, appropriate cultural competence and diversity, and acceptable qualifications.
- Management is unstable in several agencies. There is high turnover, some lack of management expertise, and a lack of formal management training, especially in personnel management (e.g., supervision, training, performance evaluation, orientation, assessment of staff training needs).
- Training needs tend to be identified by staff, rather than planned by management. In many cases this is appropriate; in others it is difficult for line staff to assess their own training needs since they do not have broad understanding of the program requirements.

Communication Networks (Relationships)

- “Limited and ineffective” is how many line staff described communication systems within agencies; line staff complained about not being involved in decisions affecting their work. Managers tended to be less critical of communication problems.
- Many staff express frustration with the perception that, although communication and coordination are essential both within agencies and among agencies, it is not a “task” that is paid for (not a unit of service per se) and therefore tend to get less attention than necessary.
- Ineffective or sub-optimum communication cause poor planning and contributed to a sense of overwhelm and burn out.

Budget Planning and Fund Development

- Larger organizations have fewer cash flow problems, as do organizations that have financially sound fiscal agents.
- Little capacity was funded in many organizations to diversify funding sources and overdependence on public funds.

Program Development Capacity

Process and Outcome Objectives

- Process objectives are generally good; impact objectives are not.
- There is lack of clarity regarding writing objectives.
- Some programs are unable to implement work in concert with objectives.

Data Collection

- Evaluation approaches are inconsistent (as was use of language).

- There was alimited collection of data and very limited use of data.

Behavioral Science Theory and Appropriate Strategies and Interventions

- A wide range of abilities to use behavioral science theory to guide appropriate strategies and interventions is reported.

Knowledge of HIV Prevention Plan and Demonstrated Use in Setting Program Objectives

- Managers and participants are aware of the HIV Prevention Plan, though sometimes this awareness is superficial. Knowledge of the Plan needs to filter through the ranks.
- For some, explicit efforts have been made to align programs with the Plan.
- Many staff want to see their work in a broader context, to see their work as community oriented/driven; the HIV Prevention Plan might help with this.

Program Evaluation Capacity

Ability to Develop Evaluation Instruments

- Very few agencies have in-house expertise to design impact-based evaluation methodology and/or instruments.

Ability to do Evaluation

- Most agencies have the capacity to collect data for certain types of evaluation, but few were able to manage and/or analyze data.
- Very few agencies have meaningful mechanisms for assuring quality of data collected.

Ability to Incorporate Evaluation Findings into Program Design

- Highly correlated to program development capacity: very few agencies have active formative evaluation components built into their programs; many agencies informally incorporate what they learned as they go along.

Computer and Technical Capacity for Data Analysis and Interpretation

- Very few agencies have sufficient and appropriate hardware, software, staff skills, or program designs which could make effective use of computer aided analysis.

Exhibit 10.2 is a chart of the overall composite of all agencies' assessment averages, broken down by capacity element. Exhibit 10.3 visually depicts the same data. From the exhibits it is possible to compare the various capacity elements against one another. Other than issues of structure and communication, dimensions of organizational capacity on average are at or above a "neutral" rating.

In the cluster of capacities under the heading “Program Development”, the development of outcome objectives is noticeably below a “medium” rating. The AIDS Office does not require programs to develop outcome objectives, so it is understandable that this rating is low. However, the AIDS Office has placed a high priority on the development and measurement of impact objectives, and this rating is near the “medium” rating. While several organizations have developed capacity to write impact objectives, many organizations are below a “medium” capacity in this area.

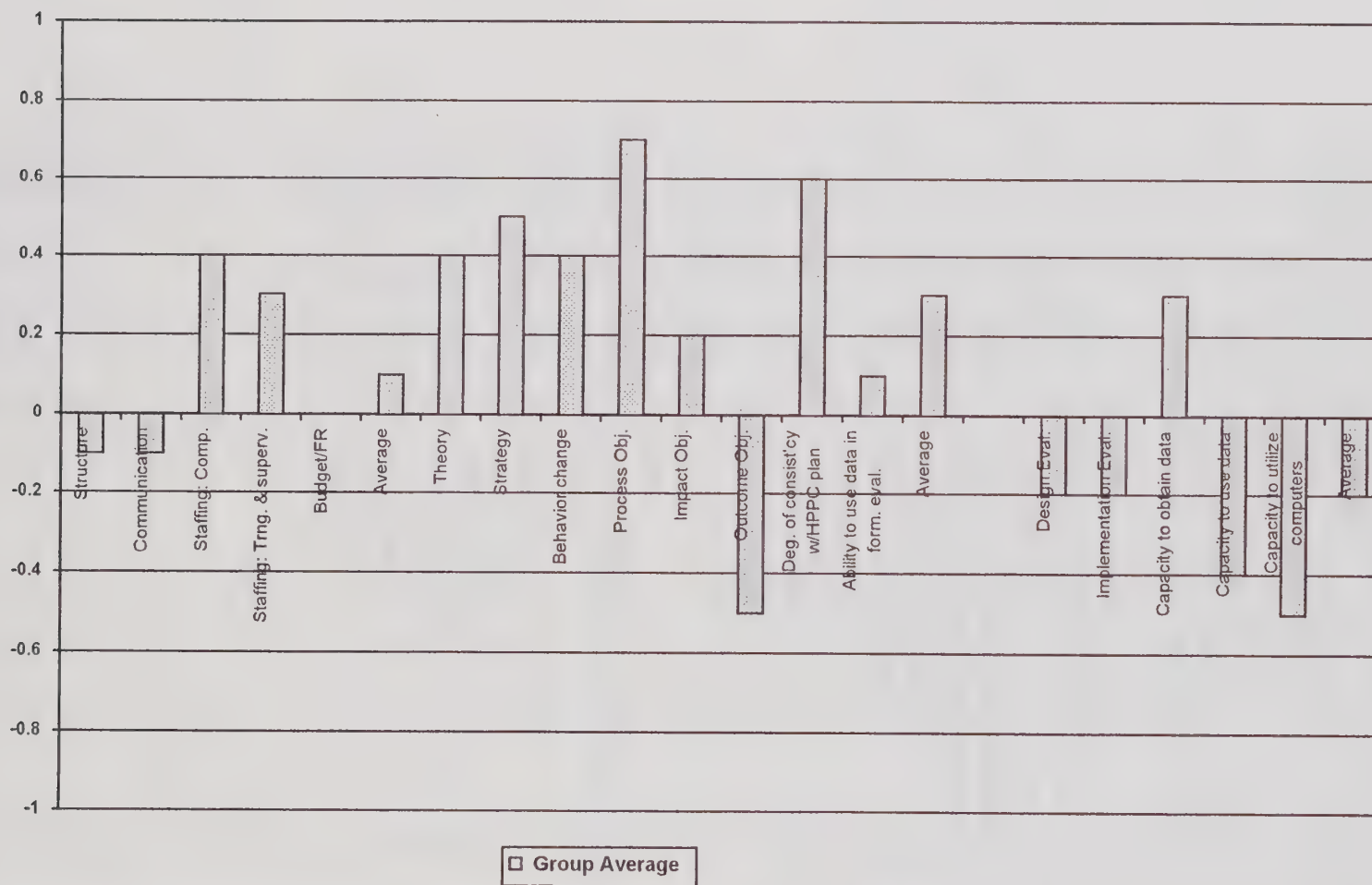
Finally, other than the ability to collect data, the vast majority of organizations are deficient in evaluation skills. These findings confirm the Council’s decision to prioritize program evaluation capacity building.

Please note that the scoring on the following charts is the overall average of the one to three (1-3) rankings that agencies were given as part of their assessments. The four succeeding exhibits are visual depictions of the summary chart. For convenience, graphs have been recalibrated from a 1-3 scale to a -1 to 1 scale. In other words, a “2” rating, which is medium or average appears on these graphs as 0, or baseline. Therefore, anything above the baseline is above a medium rating. Anything below baseline is below a medium rating.

Exhibit 10.2
Assessment Ratings

	ORGANIZATION						PROGRAM DEVELOPMENT									PROGRAM EVALUATION						
	Structure	Communication	Staffing: Composition	Staffing: Training & Supervision	Budget/FR	Average	Theory	Strategy	Behavior Change	Process Objectives	Impact Objectives	Outcome Objectives	Degree of consistency with HPPC	Ability to use data in formative evaluation	Average	Design evaluation	Implementation evaluation	Capacity to obtain data	Capacity to use data	Capacity to utilize computers	Average	OVERALL AVERAGE
Overall Average (N=27)	1.9	1.9	2.4	2.3	2.0	2.1	2.4	2.5	2.4	2.7	2.2	1.5	2.6	2.1	2.3	1.8	1.8	2.3	1.6	1.5	1.8	2.1
DPH Average (N=5)	1.8	1.8	2.4	2.2	1.8	2.0	2.8	2.6	2.2	2.6	2.0	1.6	2.6	3.0	2.4	1.8	1.6	1.8	1.2	1.5	1.6	2.0
Non-DPH Average (N=22)	1.9	2.0	2.4	2.3	2.0	2.1	2.4	2.5	2.4	2.7	2.2	1.5	2.5	2.0	2.3	1.8	1.9	2.5	1.6	1.5	1.9	2.1
Small Agency (N=11)	1.6	1.5	2.4	2.1	2.0	1.9	2.1	2.2	2.4	2.5	2.0	1.2	2.3	1.8	2.1	1.5	1.6	2.3	1.4	1.4	1.6	1.9
Large Agency Average (N=11)	2.2	2.4	2.5	2.5	2.0	2.3	2.6	2.7	2.5	2.9	2.4	1.7	2.8	2.1	2.5	2.1	2.1	2.6	1.9	1.6	2.1	2.3
HIV only Agency Average (N=9)	1.6	1.4	2.2	1.8	1.8	1.8	2.2	2.2	2.3	2.8	2.3	1.5	2.4	1.4	2.2	1.8	1.8	2.3	1.3	1.3	1.7	1.9
Mixed Agency Average (N=13)	2.2	2.3	2.5	2.6	2.2	2.4	2.5	2.6	2.5	2.7	2.2	1.5	2.6	2.3	2.4	1.8	1.9	2.5	1.8	1.6	2.0	2.2

Exhibit 10.3
Assessment Ratings Across Agencies



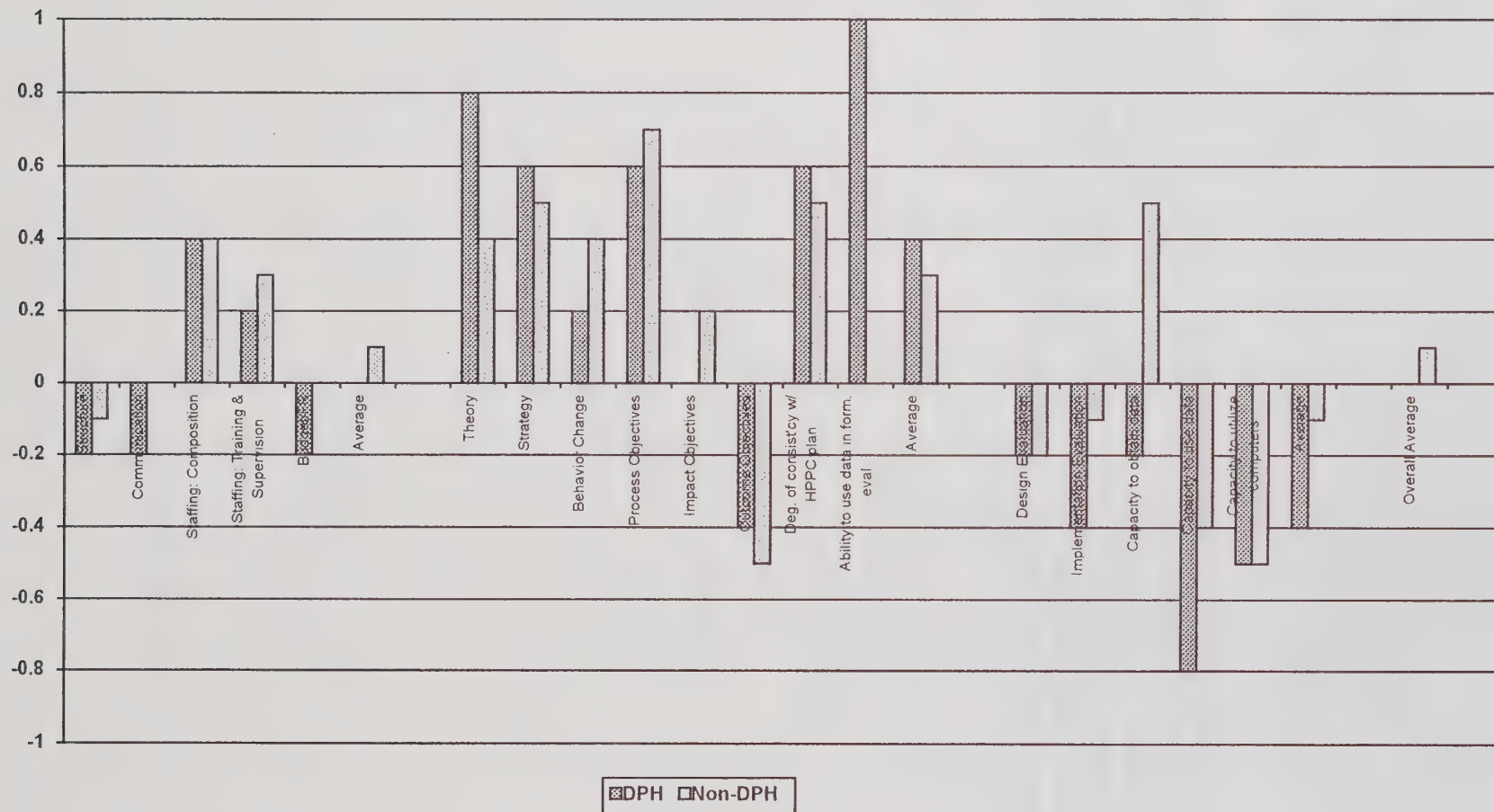
Note that assessment areas and ordering are the same for all graphs. Please also note that Exhibits 10.3 - 10.6 employ recalibrated data from Exhibit 10.2, converting ratings from a 1 to 3 scale to a -1 to 1 scale.

Comparison of Capacities Among Three Subgroupings of Programs

The Committee asked that the data be examined across three dimensions: 1) community-based programs versus Department of Public Health based programs; 2) small (i.e., less than a \$1 million annual budget) versus large organizations; and 3) organizations exclusively working on AIDS prevention versus those with other types of programs. Detailed findings for all agencies across each of the dimensions of the capacity assessment are illustrated in Exhibits 10.4 to 10.6. As with Exhibit 10.3, the data in Exhibits 10.4 to 10.6 have been recalibrated from a “1 to 3” scale to a “-1 to 1” scale, with “2” (average) becoming “0” in the recalibrated scale.

Exhibit 10.4 is a comparison of the community-based versus Department of Public Health based programs. Across all capacity dimensions, the community-based programs have relatively similar scores to the Department of Public Health programs. Community-based programs show slightly stronger capacity in the area of collecting data for evaluation purposes, while Department of Public Health programs show a slightly stronger capacity in the areas of use of theory and formative evaluation under the Program Development section.

Exhibit 10.4
Department of Public Health (DPH) v. Non-Department of Public Health Agencies

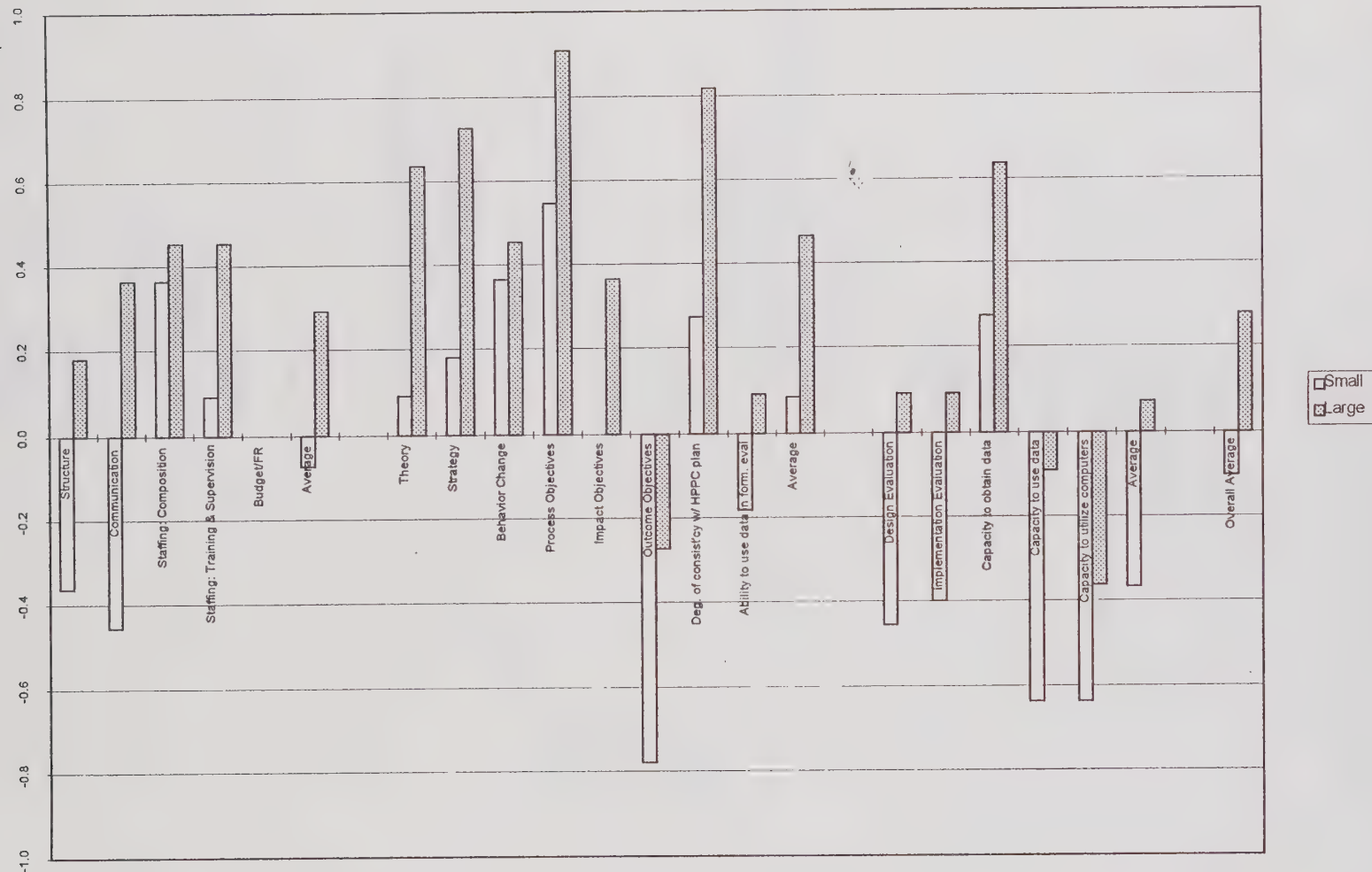


Note that assessment areas and ordering are the same for all graphs. Please also note that Exhibits 10.3-10.6 employ recalibrated data from Exhibit 10.2, converting ratings from a 1 to 3 scale to a “-1 to 1” scale.

Exhibit 10.5 contrasts small and large organizations. The large organizations are stronger across all dimensions of organizational, program development, and program evaluation capacity. This finding has important implications for focusing technical assistance on smaller organizations at more fundamental levels in many cases.

Exhibit 10.5

Small vs. Large Agencies

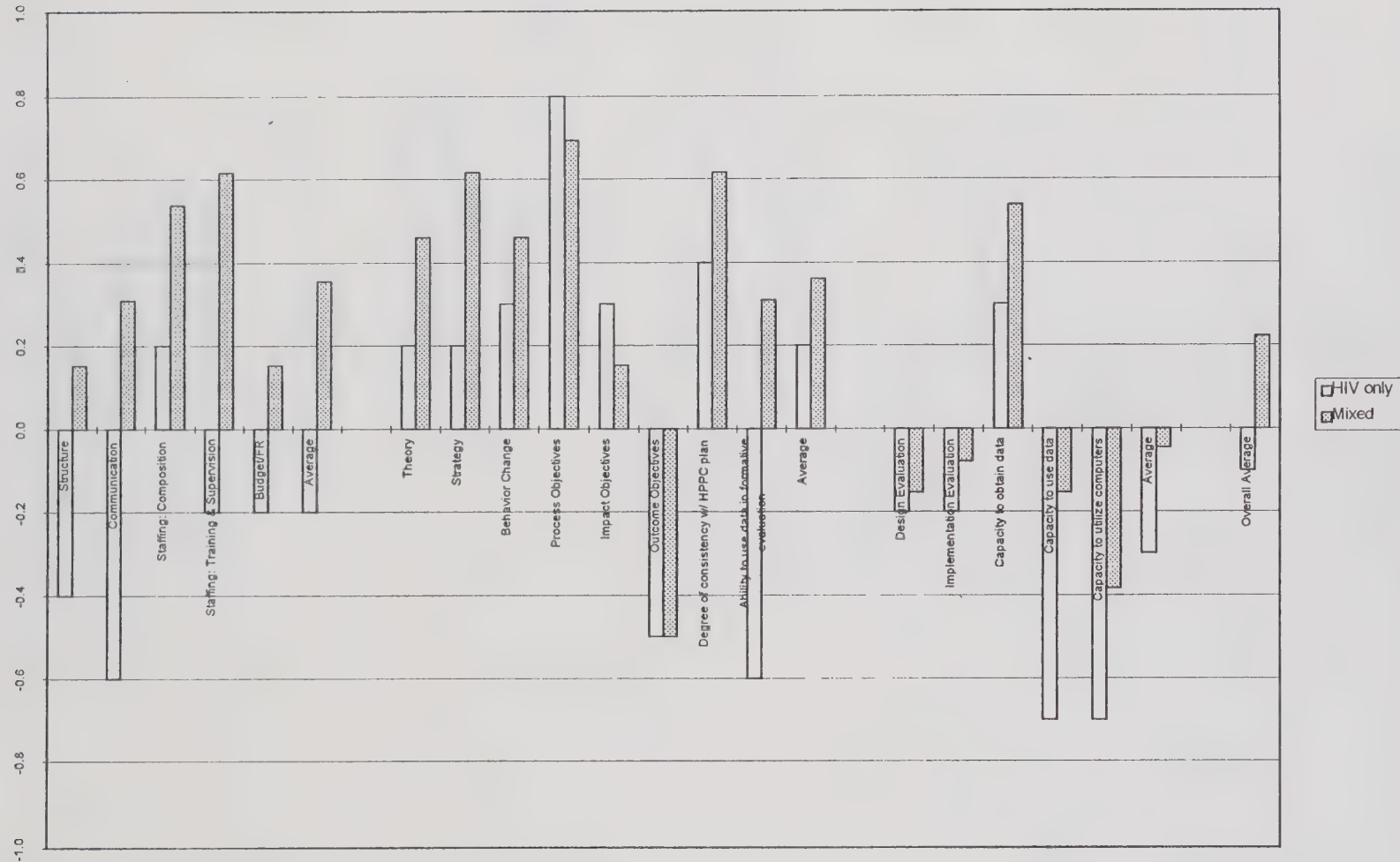


Note that assessment areas and ordering are the same for all graphs. Please also note that Exhibits 10.3-10.6 employ recalibrated data from Exhibit 10.2, converting ratings from a 1 to 3 scale to a “-1 to 1” scale.

Exhibit 10.6 contrasts organizations doing only HIV prevention work with those doing a variety of programs. The comparison is similar to that between large and small organizations, with HIV-only organizations demonstrating higher capacity across all areas.

Exhibit 10.6

HIV only vs. Mixed Agencies



Note that assessment areas and ordering are the same for all graphs. Please also note that Exhibits 10.3-10.6 employ recalibrated data from Exhibit 10.2, converting ratings from a 1 to 3 scale to a “-1 to 1” scale.

Other Findings

In addition to assessing organizational, program development, and evaluation capacities, consultants also inquired about organizations' previous technical assistance experiences, their relationships with the AIDS Office, and other collaborations. Overall findings in these areas are listed below.

Previous Technical Assistance

- Agencies mentioned a wide range of technical assistance experiences from consultants, other agencies, and the AIDS Office.
- In general, the organizations with higher scores had received more TA.
- Organizations need help with transferring knowledge from the person(s) who attended TA workshops to the rest of the organization.
- Returning from training to an environment with limited leadership or resources to implement ideas from training was mentioned as uniformly discouraging.
- Although few agencies could point to specific changes or improvements resulting from TA, virtually all agencies were enthusiastic about the provision of additional TA.
- Staff at all levels were interested in learning more about evaluation. For example, several street outreach workers expressed interest in understanding evaluation better, not so that they can do it, but to better understand how their work fits into the bigger picture.
- Some agencies are able to deliver TA.

Relationship with the AIDS Office

Nature of Relationship

- The nature of the relationship with the AIDS Office varies widely in terms of amount of contact and the number of individuals who have contact with the AIDS Office.
- While many agencies report frustrations, many agencies also report an improved, positive working relationship with the AIDS Office.

Technical Assistance Received from AIDS Office

- A large variety of responses ranged from extensive help with program development, and/or evaluation design assistance to none. Perception of the degree of helpfulness also varies widely, depending on the area of TA and the person providing it.
- Some agencies would like more help with developing their proposals.

Request for Changes in Relationship

- Clearer expectations: agencies want more consistency in messages from the AIDS Office.
- Increased access: programs want more frequent opportunities to meet with program managers. Program managers should have to go on-site once or twice a year to better understand what is going on in agencies. More technical assistance from program managers regarding program development and evaluation language, methodology, and instruments.

- Improved partnership: programs want the AIDS Office to engage in proactive partnerships with agencies.
- Programs want the AIDS Office to reduce duplication of requests for information from agencies.
- Role modeling: some agencies asserted that the AIDS Office collected information, but did not use it, and did not model the type of management it expects from agencies.
- Agencies want less “forced” collaboration.

Collaborations

- Level of involvement: some groups are involved in extensive collaboration activity, while others do very little collaboration.
- Meetings: some complain about forced and ineffectively managed collaborations.
- Costs: some point to the need to recognize the cost of collaboration and to factor this cost into projects. A need to assess the benefits of a collaboration against its costs was identified.
- Effectiveness: collaborations work best when the parties are each bringing something important to the relationship. They do not work as well when several groups have similar roles.
- Some agencies made positive comments about their partner’s fiscal management.
- There were positive comments about interaction among outreach workers, and about facilitated networking.

Summary of Findings and Implications for Provision of Technical Assistance

The assessment team identified the following key findings and implications for TA:

Organizational Capacity

- Capacity for organizational capacity and stability varies among prevention providers.
- Smaller organizations are typically not as strong structurally as large organizations.
- HIV-only organizations (about 1/3 of the programs assessed) tend to be smaller than multi-service organizations.

TA Implications:

- Work with each agency based on individualized site assessment findings.
- Invest proportionately more in organization development in Year 1 in smaller and HIV-only organizations.

Program Development Capacity

- Overall program development usually fell within the average rating. However, consistent need exists to build capacity around writing and implementing impact objectives.

TA Implications:

- Build capacity in basic program planning and development with each agency as necessary. Give special attention to developing capacity to choose appropriate impact objectives.
- Work with AIDS Office program managers to support agencies in developing useful contract language, objectives, and realistic measurement strategies.

Program Evaluation Capacity

- Program evaluation capacity is basically weak across all levels for most agencies.

TA Implications:

- Year 1 focus on basic program planning and evaluation skills.
- Look for opportunities for agencies with strong evaluation capacity to work with and support agencies without these skills.
- Explore the development of system-wide resources which can support better evaluation at all levels.
- Build basic skills for developing, conducting, and analyzing the required Behavioral Risk Assessments.

IV. TECHNICAL ASSISTANCE DELIVERY PLAN

The second phase of the OD/TA project will focus on the provision of technical assistance in the areas identified during assessment phase. The Evaluation and Technical Assistance Committee developed the following principles for allocation of the TA.

- 1) All funded agencies will be eligible for some assistance, whether or not they participated in the assessment.

The HPPC and AIDS Office asked the OD/TA team to make concerted attempts to involve these agencies, since it would benefit the agencies to go through the capacity assessment. However, it was decided that all targeted agencies funded by the AIDS Office would be eligible for technical assistance, irrespective of whether they were able to participate in the capacity assessment.

- 2) TA will be provided in the context of system-wide development activities.

The second principle articulates the importance of all capacity building work being done in the context of broader systemic developments taking place. Clearly the efforts at evaluating the prevention effort across the City will help to set new standards for programs to meet. In turn, the experience of the providers must inform the ongoing planning efforts and development of new program standards.

- 3) TA will be provided in accordance with the highest priorities identified in the assessment as part of a three-year plan for capacity building efforts. The HPPC anticipates acquiring capacity development resources to continue providing assistance over the next three years.

A priority of the OD/TA effort is to develop strategic capacity development plans for each prevention program. The need for capacity building to take place over a period of two to three years is understood. Given that the funding cycle for prevention programs is now approximately three years, this principle adopted by the Council articulates a clear commitment to work with prevention providers over the next three years to build capacity, in accordance with a carefully developed plan.

- 4) TA will be provided, as needed, to help with implementation of the Behavioral Risk Assessment required of all programs.

The development and implementation of the Behavioral Risk Assessment is a requirement added by the Council during 1996. Since this is the first step in developing providers' ability to plan, implement, analyze, and report on evaluation findings, technical assistance will be given to providers as necessary.

- 5) OD/TA services will be evaluated in terms of agency satisfaction and in terms of measurable impact objectives. Service contracts will be developed for each agency regarding OD/TA services to be delivered through this project.

The final principle adopted by the Council points to the importance of evaluating the capacity building project. The providers will be seen as "client" organizations and will have written "contracts" for services to be delivered in accordance with the capacity building plans. Clients' satisfaction with the services provided their ability to plan, implement, and evaluate their program will be assessed.

Five-Year Objectives for the Capacity Building Program

Based on the above principles, the OD/TA team developed objectives for delivering TA. The objectives are capacity building target areas for the next five years beginning with calendar year 1997.

1997 - In 1997, the focus of the capacity building effort will be on developing capacity building work plans for each agency, assisting with first-year implementation of the requirement to conduct Behavioral Risk Assessments, and beginning the delivery of other technical assistance.

By December 31, 1997, The Support Center for Nonprofit Management (Lead Contractor) Will...

- 1) Provide assistance to every participating provider in developing, conducting and analyzing data for the Behavioral Risk Assessment. Assistance will be provided in a format to be determined in consultation with the provider and AIDS Office Program Manager.
- 2) Develop three-year capacity building work plans in collaboration with each participating provider.
- 3) Deliver services to each participating provider consistent with the OD/TA principles defined above and the first-year capacity building goals identified in the capacity building work plans.
- 4) Collaboratively with the Evaluation and Technical Assistance Committee, explore opportunities for inter-agency capacity building initiatives (e.g., a central research resource which would assist in program development by providing easy access to a comprehensive literature review for each client population and intervention methodology).

1998 - In 1998, the focus of the capacity building effort will be on implementing the delivery of organizational development and technical assistance with all organizations in accordance with the capacity building work plan for each provider. Emphasis will be given to developing, implementing, and evaluating impact objectives for appropriate interventions.

By December 31, 1998, the AIDS Office, its Consultants and the HPPC Will ...

- 1) Seek continued funding to provide ongoing capacity building assistance to all providers.
- 2) Continue to offer assistance to every participating provider in developing and conducting the Behavioral Risk Assessment.
- 3) Provide TA in writing, implementing, and evaluating impact objectives.
- 4) In collaboration with the Evaluation and Technical Assistance Committee, pilot opportunities for inter-agency capacity building (e.g., a central research resource which would assist in program development by providing easy access to a comprehensive literature review for each client population and intervention methodology).
- 5) Evaluate the effectiveness of the capacity building program to date.

1999-2001 From 1999-2001, the focus of the capacity building effort will continue to focus on implementing the delivery of organization development and technical assistance with all

organizations. Emphasis will be on developing and ensuring the implementation of impact evaluation.

By December 31, 2001, the AIDS Office, its Consultants and the HPPC Will ...

- 1) Seek continued funding to provide ongoing capacity building assistance to all providers.
- 2) Provide TA on development and implementation of impact evaluation.
- 3) Evaluate OD/TA efforts.

Developing the Capacity Building Plans

Based on consultants' recommendations, agency requests, the narrative standards, and AIDS Office program managers' input, consultants will work with each program to develop individualized capacity building plans.

Exhibit 10.7 describes the planning framework for developing the capacity building plans. The first column identifies the area of organizational capacity which may need to be addressed. The second identifies the possible levels of TA intervention (i.e., individual agency, entire agency, or several agencies at once). The third column lists a variety of ways TA can be delivered. The last column identifies different sources of TA available. By matching TA areas to the most appropriate mode and level of delivery, a highly individualized combination of intervention strategies can be put together for each agency. The action plan will also specify timelines and objectives which can be used to evaluate TA activities.

Exhibit 10.7
Planning Framework for Capacity Building

Areas of Organizational Capacity	I. Level of Intervention	II. Service Format	III. Source
Organization Program Development Program Evaluation	Individual Agencies Inter-agency	Information Package Checklists Workshops Users' Groups Ongoing Outside Resource Direct TA	Printed Reference Material On-Line Information Other ASO's AIDS Office Consulting Firms (Including The Prevention/Training Center, Center For AIDS Prevention, and Others)

Coordination of Consulting Resources

A lead consultant will be assigned to each agency to assist with the design and implementation of the capacity building plan. The lead consultant will help the organization stay on target by ensuring the agency receives the appropriate TA. The lead consultant may play a variety of roles including management consultant, troubleshooter, and agent for the organization in acquiring access to appropriate resources. Organizational development and technical assistance will be evaluated at both the process and impact levels. Process evaluation will determine whether activities are implemented according to the action plans. Impact evaluation will determine whether these activities had an impact on program's abilities to plan, implement, and evaluate prevention activities.

V. COMMITTEE OPERATIONS

Tasks of the Committee

The Evaluation and Technical Assistance Committee began its work before the other 1996 HPPC committees and was charged with two large tasks: 1) the production of the strategic evaluation/data collection plan (Chapter 9 of the Plan), and 2) the design and implementation of a plan for organizational development and technical assistance (OD/TA) to prevention providers (Chapter 10 of the Plan). While these tasks were initially imagined as the work of two separate committees, it quickly became apparent that the tasks would overlap significantly, requiring extensive communication between the parties focusing on each task. The Evaluation and Technical Assistance Committee took on policy oversight of both tasks, with support from a number of AIDS Office staff and consultants. The unique composition of this Committee, which had the regular participation of two consultant teams and three AIDS Office staff members, represented a major difference between its process and that of other HPPC Committees.

The Committee Process

Because the deliverables of the committee had already been largely determined by the HPPC, the evaluation task force, and the supplemental grant objectives, the 1996 Committee members were engaged as advisors to the consultants contracted to complete the work on the deliverables. Members were asked to give guidance and oversight to the consultants, who would do much of the staff work on the two broad tasks. In the most general terms, these consultants had been assigned to assess prevention provider needs and preparedness for evaluation, and to present the Committee members with possible priorities and options for how to proceed, on a short timeline. One group of consultants was contracted to produce the strategic evaluation/data collection plan, while another was contracted to produce the plan for organizational development and technical assistance, beginning with an in-depth organizational capacity assessment of currently-funded San Francisco prevention agencies.

AIDS Office staff and consultants made efforts to inform the Committee members of the requirements that had already been set and of the issues on which there was more flexibility.

For example, the Committee played a greater role in setting the minimum requirements for prevention provider data collection, the variables for measuring risk behaviors, and the principles and objectives for the different levels of evaluation, than it did in producing the units of service requirements (which had to be approved by Department of Public Health program managers) or the standardized demographic variables (which were designed to be compatible with the Health Resources and Services Administration — HRSA — requirements). At meetings, the consultants and AIDS Office staff offered regular updates on their work on the capacity assessment and design for OD/TA, and the development of the strategic evaluation/data collection plan. Committee members and consultants then discussed the materials presented and considered revisions, overarching concerns, and future directions.

Committee Composition/Representation

The committee was comprised of 11 members. To keep continuity of direction on the tasks for evaluation and technical assistance, Council members from the two previous planning years were recruited to serve on the Committee. Members of the Committee represented a range of agencies (e.g., Mission Neighborhood Health Center, National Task Force on AIDS Prevention, Center for AIDS Prevention Studies, Institute for Community Health Outreach, the AIDS Office, HIV/STD Prevention Training Center, and the San Francisco General Hospital) and a variety of perspectives on evaluation (e.g., proposal reviewer, contract monitor, service consumer, direct service prevention provider, program director, evaluation trainer, evaluation researcher). One member of the HPPC process evaluation team acted as a participant observer, and the Committee was also supported by a logistical consultant and technical consultants from Polaris Research and Development, Inc., Harder+Company, and The Support Center.

Meetings and Training

Between January and November of 1996, the Committee held 18 meetings — 17 official meetings for Committee business, and one unofficial but well-attended meeting to plan for the AIDS Office-housed prevention provider training on data collection requirements for prevention.

In order to assist programs in developing the evaluation sections of their new proposals, three evaluation training sessions were held in early and mid-June. A total of 55 participants attended the three training sessions. Five members of the Evaluation and Technical Assistance Committee provided the training, with assistance from AIDS Office staff. The training included a thorough description of the Behavioral Risk Assessment tool and the standardized sociodemographic variables, both of which are newly required this year.

Decision-Making Procedure

Like other committees of the HPPC, this Committee strove for consensus, and agreed to take a vote whenever consensus could not be achieved. As on the other committees, consultants were not able to vote or to count for a consensus, and were not part of the committee quorum.

The presence of seven members (of the eleven total)¹ was required for a decision making quorum, and four of those seven constituted a majority vote. When more members were present, the majority was defined as anything over one-half of the Committee members present. The group felt that close majorities should be discussed, with the intention of gaining more agreement before finalizing a Committee decision. It was also agreed that AIDS Office staff could vote only when they did not outnumber the other voting committee members at the meeting. The AIDS Office staff lead for the Committee generally opted not to vote, unless her vote was required for the quorum.

Early in the committee process, members decided to use an informal version of Robert's Rules, meaning that they did not insist upon going through every step for reaching consensus when consensus was obvious. The Committee Chair or another facilitator would recognize speakers when necessary, but members tended to use a more natural conversational style through most of the meetings. The members discussed ideas thoroughly, and tended to reach consensus without difficulty.

¹ This Committee decided to require a higher ratio of present to absent members for the quorum than that adopted by other HPPC committees (which just required that more than one-half of the committee be present).

Attachment 1

Narrative Standards Site Visit Rating Criteria

What follows are descriptions or characterizations of different capacity levels in regard to agency's strength in organizational issues, program development, and program evaluation. Agencies should be rated based on whether they exhibit one or more of the characterizations described under a particular capacity level. In those cases where agencies display both high and low capabilities in a given area, the agency should be given a neutral or medium rating unless, in the consultant's judgment, the rating ought to be weighted more heavily in one direction or other of the continuum. Additionally, a neutral or medium rating should be given to those agencies that have some problems but whose problems do not present significant barriers to service delivery. Please justify each rating.

ORGANIZATIONAL ISSUES

1.

ELEMENT	Hinder	Neutral	Support
Structure	One or more respondents reported that reporting relationships are not clear.	Neither respondents nor consultants reported structural problems that present significant barriers to the delivery of service.	One or more respondents indicated that reporting relationships are clear.
	One or more respondents indicated that the division of responsibility is inappropriate and a barrier to service.		One or more respondents indicated that the division of responsibility is appropriate and supported service delivery.
	One or more respondents indicated that coordination among parts of the organization is problematic and a barrier to service.		One or more respondents indicated that coordination among parts of the organization facilitates service delivery.
	One or more respondents indicated there are inadequate opportunities for discussion, problem solving, or strategy.		One or more respondents indicated there are adequate opportunities for discussion, problem solving, or strategy.

ELEMENT	Hinder	Neutral	Support
Staffing — Composition	One or more respondents reported that the staff does not reflect the target population and/or are not culturally competent.	Neither respondents nor consultants reported staff composition problems that present significant barriers to the delivery of service.	One or more respondents reported that staff reflect the target population and/or are culturally competent.
	One or more respondents reported that the expertise and skill level of staff (and volunteers) are inadequate to deliver services.		One or more respondents reported that the expertise and skill level of staff (and volunteers) are adequate to deliver services.
	One or more respondents reported constant turnover among non-entry level positions.		One or more respondents reported little turnover among non-entry level positions.
	One or more respondents reported key management positions are unfilled.		One or more respondents reported key management positions are fully staffed.
	One or more respondents reported inadequate supervision of staff.		One or more respondents reported adequate supervision of staff.
	One or more respondents reported poorly trained managers who cannot properly supervise staff.		One or more respondents reported well-trained managers who can properly supervise staff.
Budget/ Fundraising	One or more respondents reported that the agency had insufficient resources to do what it is contracted to do.	Neither respondents nor consultants reported budgeting issues that presented significant barriers to the delivery of service.	One or more respondents reported that the agency had sufficient resources to do what it is contracted to do.

ELEMENT	Hinder	Neutral	Support
	One or more respondents reported that the HIV prevention budget is not well allocated and consistent with program objectives.		One or more respondents reported that the HIV prevention budget is well allocated and consistent with program objectives.
	One or more respondents reported that the HIV prevention budget is not developed with input from staff at all levels of the organization.		One or more respondents reported that the HIV prevention budget is developed with input from staff at all levels of the organization.

PROGRAM DEVELOPMENT

ELEMENT	Low	Medium	High
Behavioral Theory	Not only can staff not articulate a behavioral theory that leads to behavior change, they cannot articulate either explicit or implicit assumptions about how their intervention will lead to behavior change.	Neither respondents nor consultants reported behavioral theory issues that presented significant barriers to the delivery of service	Staff are able to articulate a behavioral theory that leads to behavior change, or to articulate either explicit or implicit assumptions about how their intervention will lead to behavior change.
Strategy	The strategy being used is inappropriate for the target population or being implemented according to the HPPC Plan.	The strategy used is roughly consistent with assumptions about changing clients' behavior, though it could be modified or better tailored to more successfully produce behavior change.	The strategy being used is appropriate for the target population.
	The strategy is not being implemented according to the HPPC Plan.		The strategy is being implemented according to the HPPC Plan.

ELEMENT	Low	Medium	High
	The strategy was not in and of itself lead to behavior change.		The strategy leads to behavior change.
Behavior Change	Staff were unable to articulate the behavior they are trying to change.	Presence of both low and high characteristics.	Staff were able to articulate the behavior they are trying to change.
	Program does not have explicit behavior change objectives for the program.		Program has explicit behavior change objectives for the program.
Process Objectives	Program does not have clearly delineated process measures.	Program has process measures but the measures are not always clear, or appropriate to the intervention.	Program has clearly delineated process measures appropriate to the intervention.
	Program staff were unable to document what they do.		Program staff were able to document what they do.
Impact Objectives	The program does not have clearly delineated impact measures describing the change expected within individual clients.	The program has impact measures but they do not consistently measure the change expected within individual clients.	The program has clearly delineated impact measures describing the change expected within individual clients.
Outcome Objectives	Program does not have clearly delineated outcome measures describing long term behavior changes and reduction of HIV infections for their target population.		Program has clearly delineated outcome measures describing long term behavior changes and reduction of HIV infections for their target population.
Degree of Consistency with HPPC	One or more respondents reported that program supervisors and/or managers has not read the HPPC plan.	Some aspects of strategy and intervention consistent with the HPPC plan but some not.	One or more respondents reported that program supervisors and managers has read the HPPC plan.

ELEMENT	Low	Medium	High
	One or more respondents reported that the strategy and intervention being used are not consistent with the plan.		One or more respondents reported that the strategy and intervention being used are consistent with the plan.
Ability to Use Data to Inform Program	One or more respondents reported that there is no formal feedback loop for even anecdotal data obtained from clients to inform the program.	Presence of both low and high characteristics.	One or more respondents reported that there are formal feedback loops for anecdotal data obtained from clients to inform the program.
	One or more respondents reported that staff have not reviewed relevant HIV-related secondary data or are not collecting primary data to inform the program.		One or more respondents reported that staff have reviewed relevant HIV-related secondary data or are collecting primary data to inform the program.

EVALUATION ISSUES

ELEMENT	Low	Medium	High
Design Evaluation	One or more respondents reported that the program DOESN'T have an evaluation design.	Presence of both low and high characteristics.	One or more respondents reported that the program has an evaluation design.
	One or more respondents reported that the program DOES not have staff capable of developing an evaluation design.		One or more respondents reported that the program has staff capable of developing an evaluation design.
	One or more respondents reported that there IS no comparative aspect to the evaluation design, if a design existed.		One or more respondents reported that there IS a comparative aspect to the evaluation design, if a design existed.
Implement Evaluation	One or more respondents reported that the program IS not executing their evaluation design correctly.	Presence of both low and high characteristics.	One or more respondents reported that the program is executing their evaluation design correctly.
	One or more respondents reported that the program IS not executing elements of the design correctly.		One or more respondents reported that the program is executing elements of the design correctly.
	One or more respondents reported that the program DOES not have staff sufficiently skilled to implement an evaluation.		One or more respondents reported that the program has staff sufficiently skilled to implement an evaluation.
Capacity to Obtain Data	One or more respondents reported that the program doesn't collect data in any standard way.	Presence of both low and high characteristics.	One or more respondents reported that the program collects data in a standard way.
	One or more respondents reported that the program doesn't have the staff capacity to collect data.		One or more respondents reported that program staff has the capacity to collect data.

ELEMENT	Low	Medium	High
Capacity to Use Data	One or more respondents reported that program staff does not have the capacity to use and analyze data.	Presence of both low and high characteristics.	One or more respondents reported that program staff have the capacity to use and analyze data.
	One or more respondents reported no feedback loop for evaluation findings to inform the program.		One or more respondents reported a feedback loop for evaluation findings to inform the program.
	One or more respondents reported that the program has no compilation of data that can be used to measure program effectiveness.		One or more respondents reported that the program has a compilation of data that can be used to measure program effectiveness.
Capacity to Use Computers	One or more respondents reported that the agency does not have computers or needed software.	Presence of both low and high characteristics.	One or more respondents reported that the agency has computers and the needed software.
	One or more respondents reported that prevention staff does not have direct access to agency computers.		One or more respondents reported that the prevention staff has direct access to agency computers.
	One or more respondents reported that there are no prevention staff with the needed computer skills.		One or more respondents reported that the agency has prevention staff with the needed computer skills.
	One or more respondents reported that the agency's computer hardware is old and out of date.		One or more respondents reported that the agency's computer hardware is up to date.

CHAPTER 11 - SYNTHESIS AND FUTURE DIRECTIONS

I. INTRODUCTION

The purpose of this chapter is to draw the connections between recommendations presented in the previous chapters, so that readers can appreciate the overall intent of the entire set of recommendations. Since all of the recommendations are not repeated here, this chapter does not replace the value of the previous chapters. Instead, it discusses the ways in which one recommendation relates to another — the ways in which the complete set of recommendations represent guidance for the direction of HIV prevention programs and HIV prevention planning. Connections are made not only for the work of committees active in 1996, but also for the work of the first, second, and third year of planning.

In brief, the first-year HPPC (1994) developed an approach and philosophy to community participatory HIV prevention planning and formed general criteria for priority-setting and resource allocation. This Council also set into place the use of behavioral risk populations as the primary categorizations (rather than target groups or transmission groups). The second-year Council (1995) took the approach, philosophy, and criteria as a foundation to build the priority-setting model and the guidance for strategies and interventions. The third-year Council (1996) developed a strategic plan for evaluation of the effectiveness of interventions, an extensive technical assistance plan for prevention providers, recommendations for improved coordination among agencies, and criteria for a competitive request for proposals (RFP) process. Even as committees were developing recommendations, information was shared with all members so that, for example, the resource allocation criteria included recommendations from the Linkages Committee and concepts about the strategic evaluation plan from the Evaluation/Technical Assistance Committee. Most of the remainder of this chapter describes in somewhat more detail the connections between these elements of the planning efforts — the first-year principles; the second-year priority-setting criteria and guidance for strategies and interventions; and the third-year coordination recommendations, strategic plan, technical assistance plan, and resource allocation recommendations.

II. BUILDING BLOCKS OF THE PLAN

The fundamental guiding philosophy for San Francisco prevention planning was developed in the first year and carried over through to the current year. The principles can be summarized as follows:

- 1) Risk of contracting HIV is the factor that should drive prevention;
- 2) Risk is determined by behavior and HIV seroprevalence;
- 3) Behavior is influenced by co-factors; and

- 4) Prevention activities should be characterized by the risk of behavior groups, not by traditional “transmission” or “risk” groups.

An excerpt from the 1995 Prevention Plan highlights these principles:

There is only one factor for determining which populations need focused prevention efforts: namely, a significant risk of contracting HIV. Risk of contracting HIV is caused by practicing certain identifiable behaviors. This plan is also concerned with the prevalence of HIV in the City of San Francisco. According to the CDC, San Francisco has the highest rate of AIDS cases (287.5 per 100,000 as of December 1993) of any metropolitan area in the United States. Therefore, all people in San Francisco who practice behaviors that could lead to the transmission of HIV are at high risk for contracting HIV. However, the prevalence of HIV in any population means nothing in the absence of behavior; therefore, if we consider all San Franciscans to be at high risk due to the presence of the virus in our region, we must make efficiency of HIV transmission our next level of criteria.

Beyond the actual behaviors, co-factors will be considered which increase the risk of contracting HIV with a given behavior. These co-factors are to be used along with the primary factors listed above in determining priority of risk groups. Co-factors include poverty, age, substance use, and other factors which increase the efficiency of transmission of HIV.

A second critical element developed in the first year is the use of behavioral risk populations as the primary categorization. Originally developed using language such as “Men who have sex with...” and “Women who have sex with...”, the language was revised in the second year to 1) include youth by changing the terminology to males and females, and 2) include transgender persons — both pre-operative and post-operative — by inserting the appropriate terms into the language for each of the 12 groups. The behavioral risk groups are as follows, with the abbreviations commonly used in the Plan.

	Behavioral Risk Population	Abbreviation
1.	Males who have sex with males and inject drugs; transgender male-to-female (pre-operative) who have sex with males and inject drugs; transgender female-to-male (post-operative) who have sex with males and inject drugs.	MSM-IDU
2.	Males who have sex with males and females and inject drugs; transgender male-to-female (pre-operative) who have sex with males and females and inject drugs; transgender female-to-male (post-operative) who have sex with males and females and inject drugs.	MSM/F-IDU
3.	Males who have sex with males; transgender male-to-female (pre-operative) who have sex with males; transgender female-to-male (post-operative) who have sex with males.	MSM

	Behavioral Risk Population	Abbreviation
4.	Males who have sex with males and females; transgender male-to-female (pre-operative) who have sex with males and females; transgender female-to-male (post-operative) who have sex with males and females.	MSM/F
5.	Females who have sex with males and inject drugs; transgender female-to-male (pre-operative) who have sex with males and inject drugs; transgender male-to-female (post-operative) who have sex with males and inject drugs.	FSM-IDU
6.	Males who have sex with females and inject drugs; transgender male-to-female (pre-operative) who have sex with females and inject drugs; transgender female-to-male (post-operative) who have sex with females and inject drugs.	MSF-IDU
7.	Females who have sex with males and females and inject drugs; transgender female-to-male (pre-operative) who have sex with males and females and inject drugs; transgender male-to-female (post-operative) who have sex with males and females and inject drugs.	FSF/M-IDU
8.	Females who have sex with females and inject drugs; transgender female-to-male (pre-operative) who have sex with females and inject drugs; transgender male-to-female (post-operative) who have sex with females and inject drugs.	FSF-IDU
9.	Females who have sex with males and females; transgender female-to-male (pre-operative) who have sex with males and females; transgender male-to-female (post-operative) who have sex with males and females.	FSF/M
10.	Females who have sex with males; transgender female-to-male(pre-operative) who have sex with males; transgender male-to-female (post-operative) who have sex with males.	FSM
11.	Males who have sex with females; transgender male-to-female (pre-operative) who have sex with females; transgender female-to-male (post-operative) who have sex with females.	MSF
12.	Females who have sex with females; transgender female-to-male (pre-operative) who have sex with females; transgender male-to-female (post-operative) who have sex with females.	FSF

Behavioral risk populations are used to set priorities for planning and allocating resources for HIV prevention. The critical concept in understanding behavioral risk populations is that they are defined according to the behaviors in which they engage, rather than according to an identity which they maintain. For the purposes of planning, behavioral risk populations are the appropriate categorization because it is behavior that determines an individual's risk for HIV, and prevention must address behavior in order to reduce risk and stop HIV transmission.

Target groups, in contrast, are defined by an identity which may or may not be related to behavior. Prevention providers generally define their own target populations. They may be narrowly defined, such as African-American commercial sex workers, or broadly defined, such as injection drug users. Generally, the concept of behavioral risk populations informs planning purposes, while target groups are integral to the design and implementation of prevention interventions and programs.

III. CONNECTIONS BETWEEN PLANNING ELEMENTS

Strategies and Interventions: Behavior Groups

The distinction between behavioral risk populations and target groups has important implications for assessing the effectiveness of prevention strategies and interventions. In the Strategies and Interventions Chapter, general guidelines are described for the design, implementation and evaluation of HIV prevention programs based on the published literature and HPPC committee recommendations. In 1995 the Strategies and Interventions Committee attempted to describe effectiveness and utility of interventions by behavioral risk populations, and found this to be impractical and meaningless. Most of what is known about the effectiveness of specific strategies and interventions is based on studies with defined populations and providers' knowledge of the clients they serve. Both sources of information are based on target groups, not behavioral risk populations.

The schism that exists between the researchers' and providers' focus on target groups and the planning focus on behavioral risk populations is not easily bridged. Because research studies describe one or more target groups, there is little known that applies to behavioral risk populations. About all that can be said is that, with a few exceptions, all of the strategies and most of the interventions described in Chapter 4 are appropriate across behavioral risk populations. One obvious exception is needle exchange, which is appropriate only for injection drug users. In addition, some interventions are strongly recommended for certain behavioral risk populations, such as individual outreach for injection drug users. Others are not recommended for particular groups, such as speakers' bureaus for males who have sex with males. Other data related to interventions for specific groups show that multiple session groups seem to be more successful for women (regardless of behavior) and males who have sex with males or males who have sex with males and females. Therefore, the guidance in the Strategies and Interventions Chapter is much more applicable when using the terminology of target groups rather than behavioral risk populations.

Strategies and Interventions: Target Populations

Evaluation data in the published literature and providers' perceptions of strategy and intervention effectiveness are generally relevant to target populations. Given that the range of potential target populations is extremely broad, published data are available for only a subset of target populations. Typically, the target groups for which the effectiveness of prevention strategies or interventions has been assessed are those which are believed to be at highest risk.

For example, there is evidence that peer education is an effective prevention strategy with gay and bisexual men, in-school and homeless youth, and members of African-American communities. Additionally, studies have found that natural opinion leaders and social marketing strategies are also effective with males who have sex with males.

Community organizing has been found to be an effective strategy with members of gay, lesbian, and bisexual communities. One study indicated that community organizing is also an effective prevention strategy with Latina/o communities or other groups with a “strong community identity.”

The effectiveness of street outreach as a prevention intervention has been assessed for various target populations. These studies have found that outreach is effective with commercial sex workers, adult and youth homeless populations, and male and female injection drug users.

Few studies have considered the effectiveness of counseling, testing, referral, and partner notification (CTRPN) as a prevention intervention. The only published data found indicate its effectiveness for gay men.

Needle exchange, of course, is known to be effective in encouraging safer needle use behaviors among injection drug using populations. Specifically, there is evidence of its effectiveness as a strategy for homeless populations and those living in poverty.

Single session groups have been evaluated for effectiveness with gay men, and females who have sex with males. Generally, this intervention is not recommended for high priority populations. Multiple session groups have been widely evaluated and proved to be effective among members of gay, lesbian, and bisexual communities and among injection drug users. They are also known to be particularly effective for those in institutional settings and those who have a high perception of their personal risk for HIV infection.

Media campaigns reach many people with a single, typically brief, message. The effectiveness of this intervention has been demonstrated for gay, lesbian, and bisexual communities.

No published data were found on the effectiveness of prevention case management, hotlines, speakers’ bureaus, or venue-based group outreach.

Considering the above summary of the effectiveness of prevention strategies and interventions for specific target populations, many gaps are apparent. Since groups at highest risk have been most studied, data are readily available primarily for gay communities, populations with disproportionate rates of injection drug use (such as the homeless), and communities of color, particularly the African-American community. Identifying and encouraging efforts to fill gaps in knowledge — such as what strategies and interventions are effective with Asian, Asian-American, and Pacific Islander communities — is one benefit of the community planning process exemplified by the HPPC.

Priority-Setting Criteria

Phases I and II - Behavior, Relative Risk, Prevalence, and Population Size

As many as possible of the priority-setting principles established in the first year (1994) of the HPPC were adopted and used as the foundation for prioritizing behavioral risk populations in the second year. Risk behavior, the effectiveness of various routes of transmission, and prevalence were explicitly used in the priority-setting model that ranked the behavioral risk populations. The priority-setting model starts with a listing of the 12 behavioral risk populations. Next, the risk behaviors that can enable transmission to occur were identified. Examples are sharing unsterile needles during injection drug use, receptive anal intercourse, receptive vaginal intercourse, and receiving cunnilingus. An extensive search of the literature was conducted and estimates were made of the average annual number of times that each behavioral risk population engages in each activity. Since some routes of transmission are more efficient than others, estimates were made of the relative risk of each activity — that is, how much more risky one activity is than another. The sum of the estimated frequency of risk behavior multiplied by its relative risk forms the first part, or Phase I, of the priority-setting model. The second part, or Phase II, brings in estimates of HIV seroprevalence and population size. These two phases result in a score which is used to rank the behavioral risk populations.

Priority-Setting Criteria - Phase III and IV

Co-factors and Guidance to the Resource Allocation/Resource Inventory Committee

The approach developed in the first year of prevention planning related to co-factors was also carried into the following years, and was refined. While the definition of co-factors in the first year was strictly biological—factors that increase risk of those exposed to HIV”, the Priority-Setting Criteria Committee added to the definition psychological or social elements—“factors that influence risk behaviors”. Thus, the term co-factor has two definitions: a) an agent that in combination with HIV results in infection or illness; b) an agent, behavior, or psychological state that is likely to increase risk by either increasing risky behavior or by increasing susceptibility to HIV infection. Examples of co-factors include homelessness, poverty, self-esteem, sexually transmitted diseases, and non-injection substance use. Further, the second year HPPC’s Priority-setting Criteria Committee made a distinction between a co-factor and a co-variate. A co-variate is a descriptive characteristic such as age, sex, or ethnicity.

The third revision to the concepts of co-factors is the way they are used in the prioritization process. The first-year HPPC suggested that co-factors be used along with the primary factors listed above in determining priority of risk groups. The Priority-Setting Criteria Committee extensively discussed options for doing this, and found that co-factors could not be directly included in the Priority-Setting matrix because they cannot be quantified for a behavioral risk group. The decision to not include co-factors in the matrix in no way diminishes their importance in planning and program design. The Priority-Setting Criteria Committee recommended that a committee in the following year (1996) develop ways to include co-factors

as a part of the criteria in the RFP. Further, the Priority-Setting Criteria Committee recognized that while behavioral risk populations are useful for planning, many providers will design programs for specific target groups. The Committee recommended that a 1996 committee develop ways for providers who submit funding applications to apply the information in the Plan to their specific target groups. These two suggestions were followed through, and became part of the work of the Resource Allocation/Resource Inventory Committee, discussed in detail in Chapter 7 - Resource Inventory.

The HPPC acknowledges that this priority-setting model imposes data collection and other technical tasks on prevention agencies. Since prevention agencies vary widely in their capacity to conduct research studies, the HPPC proposed an organizational development and technical assistance project, discussed in detail in chapter 10 - Capacity Building.

Resource Allocation

The last time the San Francisco Department of Public Health (SFDPH) released a competitive RFP for HIV prevention was in 1993. The SFDPH intended to reallocate prevention funding during 1995. However, since the priority-setting process of ranking behavioral risk populations was not completed until the end of 1995, and because the DPH wanted to give providers additional time to become familiar with the principal recommendations contained within the Plan, the release of a competitive RFP was delayed until the summer of 1996.

The Resource Allocation/Resource Inventory Committee operationalized the priority-setting model in order to guide the development of the content of the 1996 Request for Proposals (RFP). The Committee developed recommendations for the distribution of HIV prevention funds via a competitive RFP process, guidelines for reviewing the content of proposals, and criteria for setting aside resources for certain prevention activities.

For the RFP, the recommendations stated that behavior groups should be the proposal's building blocks, and that target groups at highest risk should be funded. Furthermore, although the highest-risk groups should be top priority, the HPPC also recommended that general education of all persons in San Francisco, regardless of risk, should receive some funding.

The HPPC recommended that the RFP include several agency requirements. Given the emphasis on behavior groups, agencies are required to identify the risk behaviors and HIV seroprevalence of the target populations they serve. Further criteria were developed for the review of proposals which met the minimum risk score. It is through the RFP that core elements of the Prevention Plan are implemented, and the Resource Allocation/Resource Inventory Committee recommendations tied into the RFP as many of the elements as were practical. Recommended criteria for review of proposals include:

- A description of the co-factors present in the applicant's target group (from the Priority-setting Criteria Committee);

- A description of the behavior theory supporting the proposed intervention (from the Strategies and Interventions Committee);
- How the intervention address the co-factors (an integration of both Priority-Setting Criteria Committee and the Strategies and Intervention Committee);
- How the intervention will result in behavioral change (from the Year 1 Planning Council);
- How the intervention meets guidelines established in the Strategies and Interventions Chapter;
- Intention of the applicant to participate in the city-wide evaluation (from the Evaluation/Technical Assistance Committee);
- Demonstration of coordination with other providers serving the same populations and linkages of clients to other needed services (from the Linkages Committee); and
- Description of the collaboration, if one is proposed, using the essential elements of collaboration (from the Linkages Committee).

Strategic Evaluation Plan

In the first year of planning, the HPPC made the provision of evaluation and technical assistance a priority. The goal was to have agencies start to collect risk behavior data and provide technical assistance to increase their capacity to collect and use this information. The AIDS Office received supplemental funds from the Centers for Disease Control to design a strategic evaluation plan and provide technical assistance.

The Plan does not contain complete information about the elements of the Priority-Setting matrix for all target populations, and providers need this information in order to effectively compete for funding. Therefore, one benefit for prevention programs of conducting behavioral risk assessments will be that they can use this information in the applications to the AIDS Office for funding.¹

The first level of the strategic evaluation plan will begin in 1997 when all prevention providers will be expected to develop, conduct, and report on a Behavioral Risk Assessment. The Behavioral Risk Assessment will require prevention providers to document the presence of HIV-transmitting behaviors among the populations they serve. Unlike a needs assessment, the Behavioral Risk Assessment will only measure risk behavior, and will be restricted to those individuals reached by the agency, rather than extending to their larger community. This assessment will provide important planning information for the HPPC, help the agency focus its efforts where the risk of HIV is highest, and develop the agency's skill in collecting, analyzing, and reporting on behavioral data. By 1999, prevention providers will be expected to incorporate the Behavioral Risk Assessment variables into an impact evaluation design to measure program effectiveness. The Behavioral Risk Assessment is based on the concept of incremental change:

¹ Developing a strong data collection and evaluation system is a priority for not only the San Francisco HPPC; many federal funders are shifting towards requiring programs to demonstrate measurable change in the risk behaviors of their target populations.

first all providers will increase their capacity to collect data, then they will increase their capacity to better use these data for program evaluation.

A second level to the strategic evaluation plan is intervention research. This is a five-year plan to measure the impact of interventions on various populations, using experimental and quasi-experimental evaluation designs. Since the activities associated with the Intervention Research Level are beyond the capacity and purview of most prevention providers, responsibility to carry out this work rests primarily with the AIDS Office. The Intervention Research Level consists of three key components: 1) ongoing information gathering and data collection, including both formative and impact research; 2) identification of knowledge gaps for the purpose of setting local research priorities; and 3) design and implementation of local evaluation research studies. Prevention providers and the HPPC will provide advice and guidance to the AIDS Office in carrying out these activities. The three-step process of information gathering, research priority-setting, and research design and implementation reflects a community-wide commitment to use information to enhance program and intervention effectiveness.

In order to set local research priorities, it is important to know exactly what evaluation research has already been undertaken with which populations and interventions. As information is collected and synthesized, this research inventory will form the basis of a training and technical assistance effort.

Taken together, this information will be used by the HPPC to set priorities for local research studies. These research priorities will be submitted to national funding agencies to ensure that the RFP process is consistent with local priorities. Through the establishment of research priorities, the HPPC may identify the need to conduct intervention-specific research (i.e., there may be insufficient information about the effectiveness of a particular intervention); or there may be a need to conduct research that is population-specific (i.e., how an intervention works with one population is known, but not with another). The AIDS Office is responsible for securing funding for these prioritized studies and for overseeing their design and implementation.

The third level to the Strategic Evaluation Plan is Population-Based Prevention Surveillance, which aims to evaluate the impact of prevention at the population level by tracking city-wide trends in indicators of HIV risk or infection over time. Population-Based Prevention Surveillance differs from traditional surveillance conducted by the Health Department because it combines existing sources of data that are routinely collected to track disease trends with new sources of data which can be used to measure the impact of prevention efforts. The synthesis of multiple sources of data such as STD surveillance, HIV surveillance, and behavioral surveillance can be a useful gauge of the community-wide impact of HIV prevention efforts.

Developing a Population-Based Prevention Surveillance system that can be used at the population level requires: 1) the identification of relevant and reliable prevention indicators; 2) the development of standard variables to be used to measure prevention indicators over time; and 3) the determination of appropriate methods of data collection for different indicators (i.e.,

population-based risk behavior surveys, sentinel seroprevalence surveys, and neighborhood mapping of disease trends).

The San Francisco Department of Public Health AIDS Office was recently awarded a grant from the Centers for Disease Control and Prevention (CDC) to facilitate the development, field-testing, and refinement of standard HIV prevention indicators to be used by all US health jurisdictions, as well as local indicators that are relevant in San Francisco. This grant will allow the AIDS Office, the HPPC, and local providers to be proactive partners in the development of *community-wide* evaluation measures, rather than waiting for such measures to be imposed from federal funders. According to the CDC grant, the prevention indicators are primarily intended to reflect an integration of existing data sources. While data on seroprevalence, related risk behaviors, and markers for risk behaviors (i.e., STDs) are routinely gathered in a variety of settings throughout San Francisco, there is a need to identify, standardize, and synthesize a core set of indicators suitable for evaluating the community level impact of HIV prevention interventions.

All three levels of the strategic evaluation will serve to develop the common language about prevention evaluation that is necessary for San Francisco providers to stand as a unified front against the HIV/AIDS epidemic. Through the information gained from this strategic evaluation plan, providers will not only know more about the risk behaviors of their target groups, and how those behaviors change, but will also know more about which strategies work best for each population. Extensive technical assistance will need to be rendered to providers in order for this evaluation plan to achieve success. Therefore, the HPPC continues to support the recommendation made in the first year of planning to offer technical assistance to the prevention providing community.

Organizational Development and Technical Assistance

The HPPC decided in the first year that their activities would include a technical assistance (TA) project to ensure that all HIV prevention providers in San Francisco have the technical and administrative capabilities to provide competent and appropriate prevention programs. As the planning process continued, the type of technical assistance that agencies will need became clear. Therefore, given the technical tasks required by the priority-setting model, the HPPC refined an Organizational Development and Technical Assistance Project (the OD/TA Project) for implementation in all San Francisco prevention agencies. Each prevention agency was assessed by independent evaluators to determine organizational, program development, and program evaluation capacity. The agency assessments were conducted in 1996. During this process, 23 of 28 community-based prevention agencies and six of seven San Francisco Department of Public Health prevention programs were assessed.

Providing agencies with technical assistance will be based on the general findings and on the specific findings from individual organizations. Priorities for the order in which agencies receive assistance will be based on gravity of need. The Evaluation and Technical Assistance Committee developed the following principles for allocation of the TA.

- 1) All funded agencies will be eligible for some assistance whether or not they participated in the assessment.
- 2) TA will be provided in the context of system-wide development activities.
- 3) TA will be provided in accordance with the highest priorities identified in the assessment as part of a three-year plan for capacity building efforts. The HPPC anticipates acquiring capacity development resources to continue providing assistance over the next three years.
- 4) TA will be provided, as needed, to help with implementation of the Behavioral Risk Assessment required of all programs.
- 5) OD/TA services will be evaluated in terms of agency satisfaction and in terms of measurable impact objectives. Service contracts will be developed for each agency regarding OD/TA services to be delivered through this project.

In 1997, contractors will be engaged to provide prevention agencies with the organizational development and technical assistance they need, as identified in the Phase 1 assessment.

Future Priority Research Studies

While the Resource Allocation/Resource Inventory Committee made recommendations to the AIDS Office regarding the RFP process, the Epidemiology and Research Committee made recommendations regarding future priority research studies. This Committee determined which populations have little prevalence and behavioral data available, conducted key informant panels to learn more about several groups, and developed principles for establishing priorities for prevalence and behavioral research studies. Establishing these priorities and gathering more information about target groups and behavioral risk populations are important ways to increase the ability of providers to respond to the changes mandated by the priority-setting model and the resource allocation recommendations.

The Epidemiology and Research Committee proposed “highest priority”, “high priority”, and “priority” studies. The two top-priority studies are a prevalence study of Asian and Pacific Islander males who have sex with males and a behavioral risk study of African American males, who have sex with males.

A Coordinated System of HIV Prevention: Referrals and Linkages

One of this community planning process’s primary goals is to unify San Francisco’s efforts to halt the spread of HIV infection. Much of this chapter refers to the integration of data sources, approaches to prevention, and service systems that meet the range of people’s needs to reduce their risk for HIV infection to a minimum. As a step to meeting this goal, a Linkages Committee was convened in the first and third years.

During the first year, the Committee decided upon 13 goals related to system linkages and service coordination. These goals refer to AIDS Office, the HPPC, and prevention providers’ activities. Generally, the goals for the AIDS Office delineate ways in which the

AIDS Office can promote and facilitate referral and linkage processes vis-a vis the RFP and inter-agency contract arrangements. Goals for the HPPC serve as reminders that throughout their work, the entire San Francisco HIV prevention system must be borne in mind and particular attention paid to ways in which coordination can be facilitated and encouraged. Likewise, prevention providers are called to seek opportunities to collaborate and create linkages with other providers in the interest of preventing HIV infection among clients with multiple and diverse needs.

During the third year, the Linkages Committee undertook a process of collecting and analyzing data regarding referral and linkage systems that currently exist among prevention agencies. Standards for referral and linkage systems were documented. Additionally, the Committee made systems-level recommendations to the AIDS Office to assist in its efforts to promote and facilitate referral and linkage mechanisms among providers.

IV. FUTURE DIRECTIONS

Goals and Objectives

In developing the 1996 Request for Proposals (RFP) for HIV prevention programs, the AIDS Office charged the HPPC with forming recommended objectives for prevention in 1997 and beyond that reflect the city-wide changes. These objectives outline the components that shape the vision of how HIV prevention should look in the coming years. These include focusing on behavioral risk populations, assessing risk behavior, standardizing data collection, developing and strengthening linkages, and providing comprehensive services to people at highest risk.

Goal 1: To eliminate HIV incidence (new infections) in San Francisco.

Goal 2: To ensure that HIV prevention in San Francisco best meets the needs of people at highest risk.

1. Providers will describe their target populations primarily by the behaviors that put them at risk for HIV as defined by the Priority-Setting Chapter so that:
 - a) those engaging in the highest-risk behaviors are targeted; and
 - b) strategies and interventions focus on changing behavior.
2. Using standardized variables, providers will collect and record sociodemographic information about their target populations, changes in behavior, and units of service, so that progress toward prevention goals can be measured and analyzed across all HIV prevention providers.

Providers will assess and document, at least once per year, the following characteristics of their target populations:

- a) risk behaviors;
- b) co-factors (biological, psychological, behavioral, social/situational, economic, and access-related); and
- c) perception of personal risk.

Needs assessments will be conducted in order to:

- a) identify and utilize the interventions that are the most appropriate and effective for preventing HIV in the population targeted; and
- b) form baseline data for evaluation of program impact.

3. In order to design the most effective prevention programs, providers will
 - a) use behavior theory; and
 - b) consider the relevant co-factors of their target populations when selecting strategies and interventions for HIV prevention.
4. The AIDS Office will ensure that each behavioral risk population is reached by a range of strategies and interventions in order to meet diverse needs and increase the likelihood that prevention messages will have an impact.
5. Providers will develop and strengthen linkages with other agencies so that:
 - a) appropriate referrals can be made;
 - b) providers can document the outcome of referrals;
 - c) a continuum of services is ensured; and
 - d) multiple interventions are provided.

The goals and objectives for the future reflect the commitment to and reliance on the concepts developed in the first year of community planning. These core concepts, which comprise the basis for reshaping HIV prevention in San Francisco are to:

- Develop a city-wide evaluation plan;
- Develop a client-level Behavioral Risk Assessment;
- Ensure that providers receive the technical assistance necessary for their programs;
- Standardize units of service;
- Strengthen linkages among providers;
- Focus prevention strategies and interventions on individuals at highest risk; and

- Require that providers use the Plan as guidance for program development and modifications.

The following summarizes the major areas of activity proposed in the 1997 HPPC process objectives:

- Review and update as necessary: research priorities, the resource inventory, and the Plan, to reflect Council activities;
- Assure representativeness of Council membership, and assess and adjust operating procedures;
- Assure coordination between providers through consistent prevention messages and strengthened linkages and referral systems;
- Review and make recommendations regarding the priority-setting process and resource allocation process;
- Provide input in the monitoring of program implementation;
- Review research projects;
- Provide guidance on the implementation of technical assistance and the strategic evaluation plan; and
- Monitor progress on HPPC objectives and develop future goals and objectives.

A Focus on Process

The third year of planning, 1996, was a critical turning point for prevention planning. It was the first year that recommendations of the Council were set into place. These recommendations were embodied in the Requests for Proposals (RFP), one issued in July and the other in August. The AIDS Office's implementation of these recommendations differed in some ways from the Council's intent. In the fourth year, attention will need to be paid to improving the process of collaboration between the HPPC and the AIDS Office. To this end, a document called the "Roles and Responsibilities" is being drafted. This document will lay out the separate and shared responsibilities of the HPPC and AIDS Office in the various areas of planning and implementation of prevention services. The document will also outline methods of improved communication and conflict resolution. Through writing this document, a stronger collaboration will be developed, which is important as more and more of the HPPC's recommendations are implemented.

V. CONCLUSION

HIV prevention efforts have been funded in San Francisco for the past 15 years. In that decade and a half, much has been learned about effective interventions, program design, and inter-agency coordination. Despite a high level of success, more is needed from prevention programs; the epidemic is not over. The people who are at risk for HIV today are those for whom behavior change is extremely difficult, new arrivals to the City who have not been exposed to comprehensive prevention interventions, youth who are just starting sexual and drug experiences, and people who need continual support for safe behavior. People who remain at risk, despite intense, comprehensive coverage of HIV prevention messages, have complex social, psychological, and situational factors that complicate the provision of HIV prevention. Providers increasingly will need to use psychological models of behavior theory in developing effective programs; they increasingly will need to link and coordinate with other agencies; and they increasingly will need to gain capacity to evaluate the impact of their programs on the lives of their target audiences.

Guidance about ways to improve prevention efforts are detailed in the previous chapters of the Prevention Plan. The guidance was developed by the HPPC — a collaborative body of representatives from prevention programs, local government, research organizations, and communities affected by HIV. The recommendations contained in the Plan point to a direction for the future—including better risk assessment, better program design, better coordination, and better evaluation. Because the guidance was developed through a community participatory process, the HPPC hopes it will not be viewed as being imposed upon the prevention providing community, but rather as coming from within it. The 1997 HIV Prevention Planning Council will continue the planning efforts — reviewing the recommendations, refining them, and developing new ones.

GLOSSARY OF TERMS

Terms to Define Groups:

Behavioral risk population (BRP) - one of the 12 groups defined according to the behaviors in which they engage rather than an identity which they maintain. BRPs are used to set priorities for planning and allocating resources for HIV prevention. For the purposes of planning, behavioral risk populations are appropriate because behavior determines an individual's risk for HIV, and prevention must address these behaviors in order to reduce risk and stop HIV transmission.

Transmission group - defined by the CDC according to how an individual contracted HIV or is at risk for becoming HIV-infected.

Target population - the group, community, or population that a prevention provider defines as that for which they provide services; can be specified by ethnicity, behavioral risk, sexual orientation/identity, age, or any co-factors. Can be defined by an identity which may or may not be related to behavior. Prevention providers generally define their own target populations. They may be narrowly defined—such as African American commercial sex workers—or broadly defined—such as injection drug users. Generally, the concept of behavioral risk populations informs planning purposes, while target groups are integral to the design and implementation of prevention interventions and programs.

Co-variate - factors that do not in themselves influence or determine risk for HIV, but are often used to describe subsets of populations or a prevention provider's target population. Age and ethnicity are the most common co-variables.

Co-factor - an agent, behavior or psychological state that is likely to increase risk by either increasing risky behavior or by increasing susceptibility to HIV infection. Co-factors can be behavioral, psychological, or situational.

Epidemiology Terms:

Serostatus - whether or not a virus is present in an individual's blood.

Seroconvert - experience a change in serostatus; i.e., the appearance of HIV in an individual's blood.

Prevalence (or seroprevalence) - the total number of people who do something or have something (e.g., engage in unprotected sex, are HIV infected) in a given population, divided by the size of that population. Expressed as a percentage.

Incidence - the number of new infections that occur in one year divided by the size of the population not infected at the beginning of that year. Expressed as a percentage.

Rate, Rates - a measure of the frequency of which an event occurs in a defined population. A rate equals the number of events in a specified period divided by the average population during that period. The use of rates rather than raw numbers is essential for comparison of events between populations with different sizes, at different times, in different places, or among different classes of people.

Rates per 100,000 - a method of comparing the number of cases among different populations with different sizes. For example, while there may be very few AIDS cases in a small population, the rates per 100,000 may be quite high.

Surrogate markers - variables or factors that are known to be associated with the outcome of interest (HIV infection) or a behavior that causes the outcome (unprotected sex) that can be measured and reported when the data on the desired outcome is not available. For example, if there are no HIV prevalence data available for a population, STD prevalence data can be looked at as surrogate marker for HIV infection.

Surveillance - ongoing monitoring of all aspects of the spread of disease that are important to effective control. The main purpose of surveillance is to detect changes in trend or distribution of disease.

Population-Based Prevention Surveillance - aims to evaluate the impact of prevention at the population level by tracking city-wide trends in indicators of HIV risk or infection over time. The synthesis of multiple sources of data such as STD surveillance (trends in STD rates over time), and HIV surveillance (trends in HIV rates in sites serving the general population and high risk clients) and behavioral surveillance (annual population-based risk behavior surveys) can be a useful gauge of the community-wide impact of HIV prevention efforts. Population-Based Prevention Surveillance differs from traditional surveillance conducted by the Health Department because it combines existing sources of data that are routinely collected to track disease trends with new sources of data which can be used to measure the impact of prevention efforts.

Parenteral - transmission of HIV through sharing unclean needles.

Perinatal - transmission of HIV from mother to child during pregnancy or labor.

Research and Statistical Terms:

Cohort design, cohort - subgroup that has something in common, usually age.

Crosssectional - a study involving one observation of a group.

KABB - an examination of the Knowledge, Attitudes, Beliefs, and Behaviors of a group.

Longitudinal - a study involving making the same observations over time.

Representative sample - selecting the sample such that the composition of the sample is likely to contain the same proportions of pertinent characteristics as could be found in the entire group.

Sociodemographic data - data that can be used to classify people into groups according to demographic, economic, and social characteristics such as age, race/ethnicity, gender, prior education, occupation, etc.

Statistical association - describes the link between two factors. Association implies that if one factor is affected, it is possible that the other factor will also be affected. For example, if there is a positive association between substance use and HIV infection, people who use substances will be more likely to be infected with HIV than people who do not. Although associations are referred to as “positive” or “negative”, the reference does not indicate a good or bad value judgment. Rather, a positive association is one in which an increase in one factor is related to an increase in another. Conversely, a negative association means that a decrease in one factor is related to a decrease in another.

Odds ratios - calculated from the results of logistic regression procedures. An odds ratio indicates the intensity of an association and is expressed in terms of a ratio (i.e., what is the chance that one situation will happen given that another has occurred). For example, in the relationship between type of sexual contact (same sex or heterosexual) and sexual activity among women, Bevier, et al. (1995) found that women reporting same sex contact were 4.1 times more likely to have three or more sexual partners than women reporting heterosexual contact. Thus, the ratio is expressed as 4.1:1; however, in a research article the first number is expressed and the other is assumed.

Statistical significance and p-value - refers to the probability that an association between factors found in a sample of people accurately represents the association in the larger population from which the sample was taken or whether the result was more likely due to chance. Statistical significance is expressed in terms of “p-values”, which indicate the percent, from 0% to 100%, probability that the findings were due to chance. Thus, as the p-value approaches 1.0 ($p=1.0$) the more certain the findings were due to chance. P-values lower than .05 are generally considered significant because there is 5% or less probability that the findings are due to chance.

Terms for Objectives:

Outcome objectives - objectives that propose change on the broadest level — the community level — and reflect results expected in the longer term. (Some evaluators and institutions define outcomes as objectives that propose change in target populations.)

Impact objectives - objectives that propose change in target populations, i.e., prevention providers or behavioral risk populations. They are usually of shorter term than the outcome

objectives. (Some evaluators and institutions define impact as objectives that propose change in on the broadest level.)

Process objectives - objectives that propose activities to be carried out during a specific time period. These objectives delineate the processes needed to bring about the expected changes proposed in the impact and outcome objectives.

Organizations:

HPPC - HIV Prevention Planning Council.

SFDPH - San Francisco Department of Public Health.

CDC - Centers for Disease Control and Prevention.

OD/TA - Organizational Development and Technical Assistance project. The OD/TA project team consisted of four consulting groups (the Support Center, Polaris, Harder+Company and Communication Sciences Group) and conducted an assessment of organizational capacity and technical assistance (TA) needs among HIV prevention providers. They are also responsible for the delivery of TA.

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INDEX

Behavioral Risk Population

FSF	105, 107, 119, 120, 122, 136, 142, 96, 156, 190, 194, 203, 468, 502- 504, 507, 673
FSF or FSF-IDU or FSF/M or FSF/M-IDU	105, 107, 119, 120, 122, 136, 142
FSF/M	105, 119, 120, 122, 136, 142, 156, 190, 468, 502, 504
FSF/M or FSF/M-IDU	105, 119-122, 136, 142
FSF/M-IDU	105, 122, 136, 142, 468, 502
FSF-IDU	122, 136, 468, 503, 673
FSM	105, 111, 120, 124, 156, 198-200, 204, 468, 491, 500, 505, 673, 675
FSM or FSM-IDU	105, 111, 120, 124
FSM-IDU	105, 111, 124, 468, 500
IDU	64, 65, 87-90, 92-99, 104-107, 110, 111, 118
	-134, 138, 141-144, 147-154, 156-170, 180, 184, 188-195, 198, 200-202, 206, 209-212, 215-218
	221, 228, 230-232, 234, 235, 237, 245, 246, 252, 253, 254, 266, 267, 274, 275-278, 292, 297, 301, 316, 319
	323, 328, 330, 339, 343, 345, 362, 365, 368, 372-374, 388, 396, 399, 417, 419, 420, 421, 424, 427, 433
	441, 443, 444, 445, 451, 455, 462, 463, 468, 469, 473, 474, 482-485, 487-490, 496, 497, 500-503, 509
	510, 517, 523-545, 523, 524, 545, 552-561, 564-566, 672-675
MSF	104, 128, 156, 198, 199, 204, 468, 501, 506, 673
MSF or MSF-IDU	127, 128, 468, 501, 673
MSM 96,	104, 111, 126, 127, 129, 130, 137-139, 143, 144, 156, 171, 172,
	174, 175, 178, 203, 222, 305, 306, 468, 496-499, 672- 675, 681
MSM or MSM/F or MSM/F-IDU or MSM-IDU	104, 111, 126, 127, 129, 130, 137-139, 143, 144
MSM/F	96, 104, 126, 127, 129, 130, 137-139, 143, 144
	156, 171, 174, 178, 203, 468, 497, 499, 672- 675, 681
MSM/F or MSM/F-IDU	104, 126, 127, 129, 130, 137-139, 143, 144
MSM/F-IDU	104, 129, 130, 138, 139, 468, 497, 672
MSM-IDU	104, 138, 139, 144, 468, 496, 672
Transgender	9, 10, 33, 68, 75, 88, 119, 121, 124, 128, 132, 182, 220, 275, 277, 291, 324, 336
	, 337, 340, 341, 346, 356, 360, 361, 373, 418, 423, 445, 472-474, 516-518, 523
	, 551, 554, 556, 558, 559, 570- 572, 574, 580, 589, 625, 626, 628, 632, 672, 673

Behaviors

Anal intercourse	127, 129, 138, 139, 172-189, 192, 195, 197, 244, 248, 251, 252, 257-259, 264,
	266, 271, 272, 283, 289, 305-307, 315, 316, 319, 323, 327, 330, 332, 405, 409, 415, 434
	450, 465, 467, 471, 472, 483-492, 498, 499, 505, 506, 513, 514, 517, 518, 538
	538, 552- 559, 625, 626, 628, 676
Cunnilingus	196, 467, 471, 472, 481, 485, 488, 489, 490, 491, 492
	493, 494, 506, 513, 514, 517, 553, 556, 625, 626, 676
Fellatio	196, 221, 467, 471, 472, 483-491, 493, 496-498, 500, 504, 505,
	506, 512-514, 517, 518, 553- 556, 625, 626
Needle sharing	284, 472, 484, 487, 488, 490, 496, 497, 500, 538, 538, 676
Oral Sex	165, 172, 178, 180, 192, 194, 195, 211, 243, 329, 456, 460, 484, 496, 506
Other blood to blood	472, 484-486, 488, 489, 491, 492, 493, 504, 507
Sharing sex toys	195, 470, 472, 484, 486-489, 491-494, 517, 518, 553, 555, 556
Vaginal intercourse	159, 160, 169, 183, 194-196, 213, 221, 223, 235, 243
	248, 255, 257, 259, 261, 267, 301, 303, 307, 310, 326, 328, 330, 361
	467, 471, 472, 485, 487, 490, -492, 505, 506, 512-514, 517, 518, 538, 538, 625, 626, 676
Vaginal to vaginal	467, 471, 472, 494, 513, 626

Co-factors

Abusive relationships	96, 243, 282, 302, 305-312, 446, 475
Commercial sex	121, 156, 160, 161, 164, 195, 202, 208, 220, 223, 226, 228, 232, 234 236-238, 242, 245, 250, 284, 290, 291, 297, 298, 301-303, 314, 326, 328, 329, 337-341, 361 368, 373, 416, 418, 420, 421 469, 475, 478, 479, 517, 524, 531, 553, 674, 675
Discrimination	18, 319, 324, 333, 345, 346, 348, 351, 356, 358-361, 363-366, 418, 475, 479 516, 555, 559
Financial instability	297, 475
Homelessness	61, 75, 76, 80, 81, 84-86, 89, 96, 123, 126-128, 131, 133-135, 137, 138, 161, 164, 69, 183, 222-226, 228, 232, 234, 236, 237, 274, 277, 296, 297, 299, 300-304, 311 2, 314, 316, 317, 319, 322, 324, 337, 340, 345, 346, 348, 367, 368, 372 4, 385, 397, 420, 454-456, 463, 475, 478, 552, 553, 555, 557, 558, 578, 586, 675, 676
Incarceration	86, 119, 120, 126, 127, 156, 202, 222, 223, 226, 231, 274, 309, 311, 312 4, 316, 317, 346, 351-353, 444, 456, 459, 479, 529, 540, 529, 540, 628, 629
Institutionalization	345, 351, 475
Jail	86, 459
Knowledge of services	345, 453, 475
Low-literacy	345, 347, 349, 557
Multiple sex partners	158, 169, 216, 230, 246, 258, 297, 307, 318, 344, 409, 475, 556
Perception of susceptibility	475
Poverty	69, 75, 76, 77, 79, 83, 85, 96, 134, 140, 169, 203, 277, 284, 286 288, 289, 296-302, 314, 318, 319, 322, 328, 338, 340, 341, 344 345, 355-358, 362, 365, 385, 418, 449, 455, 462 471, 478, 508, 552- 559, 578, 580, 595, 634, 635, 644, 672, 675, 676
Rape	305, 307, 311-314, 317, 352, 384, 385, 423, 432, 475, 478
Risky partner	191, 199, 200, 202, 248, 297, 326, 343, 344, 475, 479
Social support	284, 285, 315-317, 322, 330, 332, 381, 396, 397, 437, 454, 455, 475, 478
STDs	8, 9, 19, 24, 28, 48, 62, 63, 89, 96, 118-124, 126-132, 134-138, 141, 143, 144, 162 172, 175, 176, 180, 186, 198, 200, 201, 206, 209, 210, 217, 219, 228, 239, 240-243, 248, 250, 264, 271 273-278, 284, 286, 288-292, 313, 314, 328, 329, 331, 338, 340-342, 354, 382, 384, 385, 408, 418, 426, 427 433, 438, 446, 450, 453, 455, 457, 475, 478, 479, 511, 540-542, 552, 554, 555, 570, 574, 619, 620, 640, 662, 679, 680
Substance use/abuse	86, 120, 123-125, 127, 128, 131-133, 141-143, 145, 155, 156, 158, 160- 162, 165, 168-171, 175-180, 182-184, 186, 188, 189, 191, 192, 194, 196, 201-205, 208, 213-224, 228, 229 231-237, 239-248, 250, 253-255, 257, 258, 260, 263, 265, 266, 271, 272, 285, 286, 288, 297, 299, 301-303 306, 308, 309, 312, 314, 318-320, 322-324, 326-339, 341, 352, 356, 359, 361, 364, 372, 373, 397, 399, 406 407, 417, 418, 423, 427, 429, 432, 446, 475, 478, 479, 500, 501, 510, 511, 531, 531, 554, 633, 636, 672, 676

Co-variates

African American	9, 68, 75, 76, 77, 80, 81, 83-86, 89, 91, 96, 100, 106, 107, 109, 111, 120- 124, 126, 127, 129-131, 135, 138, 141-143, 146, 150, 158, 160-162, 164-166, 168-170, 172-176, 182-184 187, 191, 194, 199, 200, 201, 202, 205, 206, 208, 212, 216, 218, 219, 220, 240, 244, 245, 246, 247, 248, 252 253, 255, 263, 264, 280, 287, 291, 292, 298, 301, 302, 304, 316, 317, 320, 321, 329, 334, 335, 337, 344, 354 356, 357, 362, 365, 371, 372, 498, 508, 552, 553, 555, 557-574, 579, 630, 681
Asian/Pacific Islander	10, 68, 69, 75, 76, 77, 79-81, 83-85, 89, 91, 96, 101, 106, 107, 151, 255, 256, 337, 338, 346, 349, 355, 357, 373, 450, 575
Latina/o	9, 10, 68, 75-77, 80, 81, 83-86, 88-91, 94, 96, 100, 106, 107, 112- 117, 121, 123, 135, 146, 152, 158, 161, 162, 167, 173, 175, 176, 179, 180, 182, 184, 188, 192, 196, 197 199, 200, 205-210, 213-217, 220, 228, -237, 239-244, 246-248, 250, 251, 254, 255, 258, 261-272, 280, 281 287, 292, 298, 304, 316, 317, 320, 321, 331, 334, 335, 337, 344, 354-358, 361, 415, 420, 439, 456, 462 498, 553-574, 579, 588, 590, 630, 675
Latino/Hispanic	68, 75, 76, 77, 80, 81, 83-85
Native American	96, 176, 244, 271, 272, 291, 292, 304, 321, 337, 354, 355, 357, 373, 551 554, 559, 565, 569, 571, 572, 573, 574, 579

Native American/Alaska Native	68
non-Hispanic African American	68
non-Hispanic White	68
White	10, 24, 68, 75-77, 79-81, 83-86, 89-91, 94, 96, 100, 101, 106,-109, 112-117, 120, 122, 126, 127, 129, 138, 139, 142, 143, 146, 154 159-161, 164, 166, 167, 172, 173, 175-178, 180, 184, 185, 187, 188, 192, 194, 196, 197, 199, 200, 205-210 212-215, 220, 228-237, 239-244, 247, 248, 250-255, 259, 261-264, 266, 268, 270, 292, 302, 304, 310 315-317, 320, 321, 331, 334, 337, 343, 344, 347, 348, 354, 355, 357, 415, 439, 460, 498, 505, 509, 511, 594
Youth	9, 10, 33, 59, 68, 69, 75-81, 82, 84, 89, 90, 96, 103, 133-141 145, 156, 157, 159, 161, 164, 171, 173-176, 183-185, 188, 189, 191-193 197, 201, 209, 211, 217, 222-226, 228-237, 239, 241-243, 248-251, 255, 259, 274, 275, 277, 279, 283, 291 292, 299, 300-307, 317, 324, 328, 331, 332, 337, 344, 346, 348, 352, 353, 356, 358, 359, 363, 365, 367 372-374, 384-386, 389, 406, 410, 415, 416, 420, 423, 432, 438, 454-457, 462, 465, 475, 498, 508, 511, 529 539-541, 547, 551-556, 558, 559, 566, 569-574, 579, 580, 585, 586, 588
Interventions:	86, 675
Community organizing	414, 416
Counseling and testing	1, 17, 28, 32, 47, 48, 53, 55, 275, 276, 428, 429, 431, 435, 442 529, 541, 542, 529, 541, 542, 579, 582, 585, 586, 596, 597, 602, 675
General education	527, 530, 539, 541, 542, 527, 530, 539, 541, 542
Hotline	1, 345, 402, 409, 445-448, 458, 460, 527, 529, 530, 539 542, 527, 529, 530, 539, 542, 579, 580, 586, 596, 675
Individual risk reduction counseling	1, 426, 551
Media	345, 356, 358-360, 365, 382, 388, 400, 402, 410, 411, 418, 459, 460, 462-464 541, 551, 553, 555, 556, 558-570, 575-577, 675
Multiple session groups	548, 551, 560-569, 572, 674, 675
Natural opinion leaders	1, 408
Needle exchange	1, 157, 158, 163, 164, 169, 364, 365, 441-445, 500-503 515, 527-529, 539, 540, 551, 560, 561, 564-566, 570, 580, 590, 593, 598, 674, 675
Peer education	1, 18, 20, 380, 403-406, 408, 418, 548, 675
Prevention case management	1, 17, 20, 53, 348, 418, 419, 421, 422-426, 551, 553, 554 556, 559, 562-564, 566-570, 575-577, 675
Provider training	527, 539, 542, 527, 539, 542
Single session groups	1, 448, 452, 454, 560-569, 571, 675
Social marketing	1, 22, 387, 400, 410-412, 416, 675
Speakers' bureaus	457, 459, 541, 674, 675
Venue-based outreach	53, 56, 57, 417, 418, 464, 530, 545, 530, 545, 560-569, 674
Other Characteristics	
Bisexual	10, 64, 65, 68, 76, 81, 87-90, 97-99, 118-120, 122, 125-127, 133-135, 140, 141, 144, 145, 155, 156, 159, 167, 171-173, 175-178, 180-197, 201, 210, 211, 241, 243, 244, 251-253, 255 258, 266, 271, 272, 275, 280, 282, 283, 305, 306, 310, 311, 315, 316, 324, 326, 327, 331, 332, 336, 343, 344 356, 358-360, 368, 406, 415, 450, 454, 456, 465, 490, 493, 496-499, 508-511, 559, 589, 634, 675
Disabled	325, 346, 364, 580
Gay	9, 10, 61, 64, 65, 68, 76, 81, 86-90, 97, 99, 118, 120, 126, 127, 134, 135, 141 155, 156, 167, 171-173, 175-180, 182, 183, 185, 186, 187, 188, 190, 191, 192, 193, 194, 195, 201, 211, 241 243, 244, 251, 253, 255, 257, 258, 264, 266, 271, 272, 279, 280, 282, 283, 287, 302, 305, 306, 310, 315 316, 319, 324, 326, 327, 330, 331, 332, 336, 346, 348, 355, 356, 358, 359, 360, 365, 374, 389, 399, 405 406, 409, 411, 415, 416, 418, 433, 439, 450, 454-456, 460, 465, 475 483, 496-499, 508-511, 515, 555, 557, 559, 589, 634, 675
Heterosexual	10, 64, 65, 87, 90, 95, 97-99, 118-120, 123, 125-128, 131-135 141-143, 158, 159, 164, 166-168, 170, 195, 197-201, 202, 204, 206, 207, 209, 212-215, 219, 228, 232, 236 239, 240, 244, 248, 251, 252, 254, 257, 261, 264, 266, 268, 270, 278, 281, 286, 290, 297, 310, 311, 319 326, 330, 344, 356, 358, 360-362, 390, 427, 439, 471, 483, 487, 496, 509, 513, 515, 634

Immigrants.....	75, 77, 81, 82, 89, 347, 367, 368, 374, 416, 418, 553, 559, 588
Lesbian	9, 10, 68, 76, 81, 90, 97, 98, 118-120, 122, 125, 134, 141, 156, 159, 190, 191, 193,-
.....	197, 275, 324, 336, 358, 359, 360, 368, 465, 490, 493, 509, 675
Planning Process	
Bylaws	2, 3, 8, 11, 13-15, 35, 37, 545
Epidemiology and Research Committee.....	4, 13, 14, 49, 51, 60, 366, 375, 376, 525, 681
Evaluation and Technical Assistance Committee	3, 4, 45, 46, 604, 605, 608, 618
.....	624, 640, 641, 657, 659, 661, 662
Goals and Objectives Committee	4, 12, 13, 45, 46, 50, 59
Linkages Committee	4, 12, 13, 45, 49, 50, 526, 526, 578-580, 595, 602, 603, 671, 678, 682
Membership Committee.....	3, 11-16, 34, 49, 51
Priority Setting Committee.....	537
Public Comment.....	2, 3, 11, 12, 15, 39, 42, 54
Resource Allocation and Resource Inventory Committee	4, 12, 13, 48, 50, 519, 520, 521, 526
.....	528, 529, 533, 534, 519- 521, 526, 528, 529, 533, 534, 575, 676, 677, 681
Roles and Responsibilities.....	11, 532, 532, 684
Steering Committee.....	6, 7, 11, 12, 54, 521, 530, 532, 521, 530, 532
Strategies and Interventions Committee	3, 379, 526, 526, 674, 678
Population	67, 68, 79, 80, 81, 82, 83
Recommendations	
Behavior theory.....	58, 380, 386, 387, 400, 526, 529, 535, 678, 683, 685
Behavioral risk assessment.....	12, 13, 45, 46, 51-53, 56-58, 155, 423, 430, 432, 476, 525
.....	542, 593, 607-613, 622, 638, 657- 659, 678, 681, 683, 685
Coordination/collaboration.....	4, 5, 6, 12, 13, 18, 20, 26, 27, 43, 46, 50, 52, 55, 57-60, 279, 376, 381, 384
.....	385, 414, 423, 427, 429, 442, 446, 452, 526, 532, 535, 542, 546, 574, 578- 580, 588, 589, 591
.....	592, 594, 595, 598-603, 618, 640, 642, 656, 659, 678, 682, 683, 684
Evaluation plan	4, 13, 44-46, 48, 49, 51, 57, 58, 155, 525, 535, 589, 596, 597
.....	600, 595, 604, 609, 644, 658, 662, 678, 679, 683
Goals and objectives	1, 2, 4, 5, 12, 13, 20, 38, 43-46, 48, 50-52, 54, 55
.....	58, 59, 366, 394, 600, 603, 604, 658, 682-684
Priority-setting	3, 7, 21, 22, 52, 54, 59, 62, 64, 86, 87, 175, 177, 186, 327
.....	467-476, 480, 481, 483, 484, 486-488, 489, 492, 493, 512, 513, 514, 518
.....	519, 520, 523, 524, 525, 527, 529, 530, 531, 534, 535, 542
.....	544, 545, 546, 548, 614, 616, 618, 641, 658, 671, 676-681, 684
Resource allocation.....	1, 46, 48, 50, 52, 54, 57, 519-534, 535, 537-539, 544, 545
.....	592, 599, 600, 615, 671, 677, 679, 681, 682, 684
Resource inventory	2, 4, 5, 12, 13, 48, 50, 59, 86, 519-521, 526-529, 533, 534
.....	547, 548, 575, 576, 624, 676, 677, 681, 684
Strategic Evaluation.....	13, 48, 49
Technical Assistance	4, 18, 20, 23, 27-29, 31, 32, 45-49, 51-53, 55, 58, 59, 476, 521, 531
.....	550, 606-614, 623, 628, 638-643, 651, 655, 657-662, 671, 677-681, 683, 684

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